

overnight incubation of the cells. the growth media is removed and replaced with GIBCO EC-SFM. The cells are treated with the appropriate dilutions of the protein of interest or control protein sample(s) (prepared in SFM) in triplicate wells with additional bFGF to a concentration of 10 ng/ ml. Once the cells have been treated with the samples, the plate(s) is/are placed back in the 37° C incubator for three days. After three days 10 ml of stock alamar blue (Biosource Cat# DAL1100) is added to each well and the plate(s) is/are placed back in the 37°C incubator for four hours. The plate(s) are then read at 530nm excitation and 590nm emission using the CytoFluor fluorescence reader. Direct output is recorded in relative fluorescence units.

Alamar blue is an oxidation-reduction indicator that both fluoresces and changes color in response to chemical reduction of growth medium resulting from cell growth. As cells grow in culture, innate metabolic activity results in a chemical reduction of the immediate surrounding environment. Reduction related to growth causes the indicator to change from oxidized (non-fluorescent blue) form to reduced (fluorescent red) form. i.e. stimulated proliferation will produce a stronger signal and inhibited proliferation will produce a weaker signal and the total signal is proportional to the total number of cells as well as their metabolic activity. The background level of activity is observed with the starvation medium alone. This is compared to the output observed from the positive control samples (bFGF in growth medium) and protein dilutions.

Example 47: Detection of Inhibition of a Mixed Lymphocyte Reaction

This assay can be used to detect and evaluate inhibition of a Mixed Lymphocyte Reaction (MLR) by gene products (e.g., isolated polypeptides). Inhibition of a MLR may be due to a direct effect on cell proliferation and viability, modulation of costimulatory molecules on interacting cells, modulation of adhesiveness between lymphocytes and accessory cells, or modulation of cytokine production by accessory cells. Multiple cells may be targeted by these polypeptides

since the peripheral blood mononuclear fraction used in this assay includes T, B and natural killer lymphocytes, as well as monocytes and dendritic cells.

Polypeptides of interest found to inhibit the MLR may find application in diseases associated with lymphocyte and monocyte activation or proliferation. These
5 include, but are not limited to, diseases such as asthma, arthritis, diabetes, inflammatory skin conditions, psoriasis, eczema, systemic lupus erythematosus, multiple sclerosis, glomerulonephritis, inflammatory bowel disease, crohn's disease, ulcerative colitis, arteriosclerosis, cirrhosis, graft vs. host disease, host vs. graft disease, hepatitis, leukemia and lymphoma.

10 Briefly, PBMCs from human donors are purified by density gradient centrifugation using Lymphocyte Separation Medium (LSM®, density 1.0770 g/ml, Organon Teknika Corporation, West Chester, PA). PBMCs from two donors are adjusted to 2×10^6 cells/ml in RPMI-1640 (Life Technologies, Grand Island, NY) supplemented with 10% FCS and 2 mM glutamine. PBMCs from a third donor is
15 adjusted to 2×10^5 cells/ml. Fifty microliters of PBMCs from each donor is added to wells of a 96-well round bottom microtiter plate. Dilutions of test materials (50 μ l) is added in triplicate to microtiter wells. Test samples (of the protein of interest) are added for final dilution of 1:4; rhuIL-2 (R&D Systems, Minneapolis, MN, catalog number 202-IL) is added to a final concentration of 1 μ g/ml; anti-CD4 mAb (R&D
20 Systems, clone 34930.11, catalog number MAB379) is added to a final concentration of 10 μ g/ml. Cells are cultured for 7-8 days at 37°C in 5% CO₂, and 1 μ C of [³H] thymidine is added to wells for the last 16 hrs of culture. Cells are harvested and thymidine incorporation determined using a Packard TopCount. Data is expressed as the mean and standard deviation of triplicate determinations.

25 Samples of the protein of interest are screened in separate experiments and compared to the negative control treatment, anti-CD4 mAb, which inhibits proliferation of lymphocytes and the positive control treatment, IL-2 (either as recombinant material or supernatant), which enhances proliferation of lymphocytes.

30 One skilled in the art could easily modify the exemplified studies to test the activity of polynucleotides (e.g., gene therapy), antibodies, agonists, and/or

antagonists and fragments and variants thereof.

It will be clear that the invention may be practiced otherwise than as particularly described in the foregoing description and examples. Numerous modifications and variations of the present invention are possible in light of the above teachings and, therefore, are within the scope of the appended claims.

The entire disclosure of each document cited (including patents, patent applications, journal articles, abstracts, laboratory manuals, books, or other disclosures) in the Background of the Invention, Detailed Description, and Examples is hereby incorporated herein by reference. Further, the hard copy of the sequence listing submitted herewith and the corresponding computer readable form are both incorporated herein by reference in their entireties. Moreover, the hard copy of and the corresponding computer readable form of the Sequence Listing of Serial No. 60/124,270 are also incorporated herein by reference in their entireties.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209059
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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ATCC Deposit No.: 209059**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209059

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209060
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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ATCC Deposit No.: 209060

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner. the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209060

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209061
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209061**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209061

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

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B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209062</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
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ATCC Deposit No.: 209062

CANADA

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NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209062

DENMARK

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209063</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209063**CANADA**

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FINLAND

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UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 209063

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209064</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

For receiving Office use only <input checked="" type="checkbox"/> This sheet was received with the international application Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	For International Bureau use only <input type="checkbox"/> This sheet was received by the International Bureau on: Authorized officer
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ATCC Deposit No.: 209064

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 209064**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> . line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209065</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

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ATCC Deposit No.: 209065

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209065

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file
reference number

PA101PCT

International application No.

UNASSIGNED

INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209066
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: 209066

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209066

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file
reference number

PA101PCT

International application No.

UNASSIGNED

INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209067</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

<p><input checked="" type="checkbox"/> For receiving Office use only</p> <p><input checked="" type="checkbox"/> This sheet was received with the international application</p> <p>Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665</p>	<p><input type="checkbox"/> For International Bureau use only</p> <p><input type="checkbox"/> This sheet was received by the International Bureau on:</p> <p>Authorized officer</p>
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ATCC Deposit No.: 209067

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209067

DENMARK

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 20 May 1997	Accession Number 209068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3665	Authorized officer

ATCC Deposit No.: 209068

CANADA

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NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209068**DENMARK**

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SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>20 May 1997</u>	Accession Number <u>209069</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209069**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209069

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209579
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3865	Authorized officer

ATCC Deposit No.: 209579

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 209579

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 12 January 1998	Accession Number 209578
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on:
Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 209578**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 209578

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203067
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: 203067

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

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ATCC Deposit No.: 203067

DENMARK

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 16 July 1998	Accession Number 203068
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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<p>For receiving Office use only</p> <p><input checked="" type="checkbox"/> This sheet was received with the international application</p> <p>Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 306-3665</p>	<p>For International Bureau use only</p> <p><input type="checkbox"/> This sheet was received by the International Bureau on:</p> <p>Authorized officer</p>
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ATCC Deposit No.: 203068

CANADA

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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FINLAND

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UNITED KINGDOM

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ATCC Deposit No.: 203068**DENMARK**

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SWEDEN

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NETHERLANDS

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Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 01 February 1999	Accession Number 203609
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

<input checked="" type="checkbox"/> For receiving Office use only This sheet was received with the international application Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3865	<input type="checkbox"/> For International Bureau use only This sheet was received by the International Bureau on: _____ Authorized officer
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ATCC Deposit No.: 203609**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203609**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>01 February 1999</u>	Accession Number <u>203610</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
<u>Europe</u> In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g. "Accession Number of Deposit")	

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ATCC Deposit No.: 203610**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203610

DENMARK

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 17 November 1998	Accession Number 203485
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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Authorized officer Sonya D. Barnes PCT/Internat'l Appl Processing Div (703) 305-3665	Authorized officer

ATCC Deposit No.: 203485**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: 203485**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution <i>(including postal code and country)</i> <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>18 June 1999</u>	Accession Number <u>PTA-252</u>
C. ADDITIONAL INDICATIONS <i>(leave blank if not applicable)</i> This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE <i>(if the indications are not for all designated States)</i>	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS <i>(leave blank if not applicable)</i>	
The indications listed below will be submitted to the International Bureau later <i>(specify the general nature of the indications e.g., "Accession Number of Deposit")</i>	

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ATCC Deposit No.: PTA-252**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-252**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution American Type Culture Collection	
Address of depositary institution (including postal code and country) 10801 University Boulevard Manassas, Virginia 20110-2209 United States of America	
Date of deposit 18 June 1999	Accession Number PTA-253
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
The indications listed below will be submitted to the International Bureau later (specify the general nature of the indications e.g., "Accession Number of Deposit")	

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ATCC Deposit No.: PTA-253**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

The applicant hereby requests that the application has been laid open to public inspection (by the Norwegian Patent Office), or has been finally decided upon by the Norwegian Patent Office without having been laid open inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Norwegian Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Norwegian Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on the list of recognized experts drawn up by the Norwegian Patent Office or any person approved by the applicant in the individual case.

AUSTRALIA

The applicant hereby gives notice that the furnishing of a sample of a microorganism shall only be effected prior to the grant of a patent, or prior to the lapsing, refusal or withdrawal of the application, to a person who is a skilled addressee without an interest in the invention (Regulation 3.25(3) of the Australian Patents Regulations).

FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-253**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

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NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

Applicant's or agent's file reference number	PA101PCT	International application No.	UNASSIGNED
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INDICATIONS RELATING TO A DEPOSITED MICROORGANISM

(PCT Rule 13bis)

A. The indications made below relate to the microorganism referred to in the description on page <u>100</u> , line <u>N/A</u>	
B. IDENTIFICATION OF DEPOSIT Further deposits are identified on an additional sheet <input type="checkbox"/>	
Name of depositary institution <u>American Type Culture Collection</u>	
Address of depositary institution (including postal code and country) <u>10801 University Boulevard</u> <u>Manassas, Virginia 20110-2209</u> <u>United States of America</u>	
Date of deposit <u>22 December 1999</u>	Accession Number <u>PTA-1081</u>
C. ADDITIONAL INDICATIONS (leave blank if not applicable) This information is continued on an additional sheet <input type="checkbox"/>	
D. DESIGNATED STATES FOR WHICH INDICATIONS ARE MADE (if the indications are not for all designated States)	
Europe In respect to those designations in which a European Patent is sought a sample of the deposited microorganism will be made available until the publication of the mention of the grant of the European patent or until the date on which application has been refused or withdrawn or is deemed to be withdrawn, only by the issue of such a sample to an expert nominated by the person requesting the sample (Rule 28 (4) EPC).	
E. SEPARATE FURNISHING OF INDICATIONS (leave blank if not applicable)	
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ATCC Deposit No.: PTA-1081**CANADA**

The applicant requests that, until either a Canadian patent has been issued on the basis of an application or the application has been refused, or is abandoned and no longer subject to reinstatement, or is withdrawn, the Commissioner of Patents only authorizes the furnishing of a sample of the deposited biological material referred to in the application to an independent expert nominated by the Commissioner, the applicant must, by a written statement, inform the International Bureau accordingly before completion of technical preparations for publication of the international application.

NORWAY

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AUSTRALIA

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FINLAND

The applicant hereby requests that, until the application has been laid open to public inspection (by the National Board of Patents and Regulations), or has been finally decided upon by the National Board of Patents and Registration without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art.

UNITED KINGDOM

The applicant hereby requests that the furnishing of a sample of a microorganism shall only be made available to an expert. The request to this effect must be filed by the applicant with the International Bureau before the completion of the technical preparations for the international publication of the application.

ATCC Deposit No.: PTA-1081**DENMARK**

The applicant hereby requests that, until the application has been laid open to public inspection (by the Danish Patent Office), or has been finally decided upon by the Danish Patent office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the Danish Patent Office not later than at the time when the application is made available to the public under Sections 22 and 33(3) of the Danish Patents Act. If such a request has been filed by the applicant, any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Danish Patent Office or any person by the applicant in the individual case.

SWEDEN

The applicant hereby requests that, until the application has been laid open to public inspection (by the Swedish Patent Office), or has been finally decided upon by the Swedish Patent Office without having been laid open to public inspection, the furnishing of a sample shall only be effected to an expert in the art. The request to this effect shall be filed by the applicant with the International Bureau before the expiration of 16 months from the priority date (preferably on the Form PCT/RO/134 reproduced in annex Z of Volume I of the PCT Applicant's Guide). If such a request has been filed by the applicant any request made by a third party for the furnishing of a sample shall indicate the expert to be used. That expert may be any person entered on a list of recognized experts drawn up by the Swedish Patent Office or any person approved by a applicant in the individual case.

NETHERLANDS

The applicant hereby requests that until the date of a grant of a Netherlands patent or until the date on which the application is refused or withdrawn or lapsed, the microorganism shall be made available as provided in the 31F(1) of the Patent Rules only by the issue of a sample to an expert. The request to this effect must be furnished by the applicant with the Netherlands Industrial Property Office before the date on which the application is made available to the public under Section 22C or Section 25 of the Patents Act of the Kingdom of the Netherlands, whichever of the two dates occurs earlier.

What Is Claimed Is:

1. An isolated nucleic acid molecule comprising a polynucleotide having a nucleotide sequence at least 95% identical to a sequence selected from the group
5 consisting of:

(a) a polynucleotide fragment of SEQ ID NO:X or a polynucleotide fragment of the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(b) a polynucleotide encoding a polypeptide fragment of SEQ ID NO:Y or a
10 polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(c) a polynucleotide encoding a polypeptide fragment of a polypeptide encoded by SEQ ID NO:X or a polypeptide fragment encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(d) a polynucleotide encoding a polypeptide domain of SEQ ID NO:Y or a
15 polypeptide domain encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X;

(e) a polynucleotide encoding a polypeptide epitope of SEQ ID NO:Y or a polypeptide epitope encoded by the cDNA sequence included in the related cDNA
20 clone, which is hybridizable to SEQ ID NO:X;

(f) a polynucleotide encoding a polypeptide of SEQ ID NO:Y or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X, having biological activity;

(g) a polynucleotide which is a variant of SEQ ID NO:X;

(h) a polynucleotide which is an allelic variant of SEQ ID NO:X;
25

(i) a polynucleotide which encodes a species homologue of the SEQ ID NO:Y;

(j) a polynucleotide capable of hybridizing under stringent conditions to any one of the polynucleotides specified in (a)-(i), wherein said polynucleotide does not
30 hybridize under stringent conditions to a nucleic acid molecule having a nucleotide

sequence of only A residues or of only T residues.

2. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding a protein.

5

3. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises a nucleotide sequence encoding the sequence identified as SEQ ID NO:Y or the polypeptide encoded by the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

10

4. The isolated nucleic acid molecule of claim 1, wherein the polynucleotide fragment comprises the entire nucleotide sequence of SEQ ID NO:X or the cDNA sequence included in the related cDNA clone, which is hybridizable to SEQ ID NO:X.

15

5. The isolated nucleic acid molecule of claim 2, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

20

6. The isolated nucleic acid molecule of claim 3, wherein the nucleotide sequence comprises sequential nucleotide deletions from either the C-terminus or the N-terminus.

25

7. A recombinant vector comprising the isolated nucleic acid molecule of claim 1.

8. A method of making a recombinant host cell comprising the isolated nucleic acid molecule of claim 1.

30

9. A recombinant host cell produced by the method of claim 8.

10. The recombinant host cell of claim 9 comprising vector sequences.
11. An isolated polypeptide comprising an amino acid sequence at least
5 95% identical to a sequence selected from the group consisting of:
- (a) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (b) a polypeptide fragment of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone, having biological activity;
 - 10 (c) a polypeptide domain of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (d) a polypeptide epitope of SEQ ID NO:Y or of the sequence encoded by the cDNA included in the related cDNA clone;
 - (e) a full length protein of SEQ ID NO:Y or of the sequence encoded by the
15 cDNA included in the related cDNA clone;
 - (f) a variant of SEQ ID NO:Y;
 - (g) an allelic variant of SEQ ID NO:Y; or
 - (h) a species homologue of the SEQ ID NO:Y.
- 20 12. The isolated polypeptide of claim 11, wherein the full length protein comprises sequential amino acid deletions from either the C-terminus or the N-terminus.
13. An isolated antibody that binds specifically to the isolated polypeptide
25 of claim 11.
14. A recombinant host cell that expresses the isolated polypeptide of claim 11.
- 30 15. A method of making an isolated polypeptide comprising:

(a) culturing the recombinant host cell of claim 14 under conditions such that said polypeptide is expressed; and

(b) recovering said polypeptide.

5 16. The polypeptide produced by claim 15.

17. A method for preventing, treating, or ameliorating a medical condition, comprising administering to a mammalian subject a therapeutically effective amount of the polypeptide of claim 11 or the polynucleotide of claim 1.

10

18. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

(a) determining the presence or absence of a mutation in the polynucleotide of claim 1; and

15 (b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or absence of said mutation.

19. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject comprising:

20 (a) determining the presence or amount of expression of the polypeptide of claim 11 in a biological sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

25 20. A method for identifying a binding partner to the polypeptide of claim 11 comprising:

(a) contacting the polypeptide of claim 11 with a binding partner; and

(b) determining whether the binding partner effects an activity of the polypeptide.

30

21. The gene corresponding to the cDNA sequence of SEQ ID NO:Y.
22. A method of identifying an activity in a biological assay, wherein the method comprises:
- 5 (a) expressing SEQ ID NO:X in a cell;
- (b) isolating the supernatant;
- (c) detecting an activity in a biological assay; and
- (d) identifying the protein in the supernatant having the activity.
- 10 23. The product produced by the method of claim 20.

SEQUENCE LISTING

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Steve Ruben

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<210> 10

<211> 3064

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1375)

<223> n equals a,t,g, or c

<400> 10

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ctgcgtcagt ttcagttcat ggcctggcca gaccatggag ttcctgagta cccaactccc 180
atcctggcct tcctacgacg ggtcaaggcc tgcaaccccc tagacgcagg gcccatggtg 240
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cagaggaact acatggtgca gacggaggac cagtacgtgt tcatccatga ggcgtgctg 420
gaggctgcca cgtgcggcca cacagaggtg cctgcccgca acctgtatgc ccacatccag 480
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```

```

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acaa 3064

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<210> 11

<211> 1496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1478)

<223> n equals a,t,g, or c

<400> 11

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tgtgttccct gctccactt ttcttccctt ggtttgtgat tattaggaga gaggttttgc 180
aaagactcgt tgctgtgaaa gaatcttttt ttaattttta tcctagagtc agtcactttt 240
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tcctcatgga agactgtgtg tatgaattgg agtaacagaa ctgaaataca cttaaacagt 360
gacagcagta ctcccaggg tgggggccat atttctctgt gtcctactct gagcaacttc 420
tcagagatac gagggggcta gggttttccc atctgggaaa tggggtgaaa gtctgcagat 480
tgtaaatga aatatagaat cagagaaaaa gaaaagtcag tgatataaat agatcatttc 540
atagaaatta gggtagattt ttatttcaac tactactgga gaatttaata aaaggcatta 600
tttgaaaagt ttttctaaca tagatttagg gttttttttt tttagagtgg acacactaca 660
tttaaaagca attattttgc tattcagatt ttttattatc tgaaaatgaa attatctgtt 720
ttacttttca aagctttgtg aaacaaactt gaagttatag ggaggtaagc catctccaac 780
tctgcaggtc aaacgaaagt ttgggaaata cttttgacat cccacaatac agaatgtctt 840

```

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ctgttggggg gtgctggggg tgggtaccga gcgccttccc ctcacctcaa ccagagaaga 1440
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<210> 12

<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1402)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1407)

<223> n equals a,t,g, or c

<400> 12

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gagacactgc gaaagcaaac cgaggagaaa gagaaaaaag agaagccaaa atctgataag 180
actgaagaga tagcagaaga ggaagaaact gttttcccca aagctaaaca agttaaaaag 240
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gaggagccat ctcaaaatga catttctcct aaaacccaaa gtttgagaaa gaaaaaggag 360
cccattgaaa agaaagtggg ttcttctaaa accaaaaaag tgacaaaaaa tgaggagcct 420
tctgaggaag aaatagatgc tcctaagccc aagaagatga agaaagaaaa ggaaatgaat 480
ggagaaacta gagagaaaag ccccaaactg aagaatggat ttcctcatcc tgaaccggac 540
tgtaacccca gtgaagctgc cagtgaagaa agtaacagtg agatagagca ggaaatacct 600
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tacagcggga aggacttaat tgcacaggca cggacaggaa ctgggaagac attctccttt 780
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caatttgaac gcatgaggaa tgggattgat atcctggttg gaacaccagg tcgtatcaaa 1020
gaccacatac agaatggcaa actagatctc accaaaacta agcatgttgt cctggatgaa 1080
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gtggaccaga tgttgatat gggatttgct gatcaagtgg aagagatfff aagtgtggca 1140
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tggttattta atgttgccaa gaaatacatg aaatctacat atgaacaggt ggacctgatt 1260
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<210> 13

<211> 3548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (346)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (389)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1103)

<223> n equals a,t,g, or c

<400> 13

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aactctcagg ttgggggaat gtcagcaaac cttcaggtac cagcaaatct cttctggaga 480
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aggtgggacc taggaattca acaataaaaa ataaaaaaca cgccatctca gtaaatctgt 780
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sagcmaggca gctgccggca gcngagcagc agccrccaca gcagccgyca cagcagccac 1140
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aagaggaaga aaggcggaag caggaagaat tgttackcaa acaggaakag gaggctgcaa 1560
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<210> 14

<211> 466

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (95)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<400> 14

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tgccttgga aaagaagacc ttaccartaa gatttcagac agaggagggtg gtgttccctt 180
gagaattatt gaccgcctct ttagttatac atactccact gcaccaacgc ctgtgatgga 240
taattcccg aatgetcctt tggttggtt tggttacggc ttgccaatth ctcgtctgta 300
tgcaaagtac tttcaaggar atctgaatct ctactcttta wcaggatatg gaacagatgc 360
tatcatctac ttaaaggctt tggttackkc ttgccaatth ctcgtctgta tgcaaagtac 420
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<210> 15

<211> 864

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (847)

<223> n equals a,t,g, or c

<400> 15

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cagacaagat tgaaaacatg gtgcctgtta aagatcgaat cattaaaatt agctttaatg 480
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agtgttctg ttttgaagaa caaaggctta atccccaaga ggaagtagga tatgccagt 720
ttttctaca ttgatcctga atttgctgaa gatccaagga atgattaaag ttgrtcttat 780
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<210> 16

<211> 2805

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (11)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<400> 16

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acacagtagg agattttatg ttattccttg gcaagggtgct gatagtctgc agcacaggtt 180
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<210> 17
<211> 710
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (608)
<223> n equals a,t,g, or c

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ggggatttgg attgttgctc ctctgctctg aagaaagtgc tgtctggctc caactccagt 180
tctttcccct gagcagcgcc tggaacctaa cccttcccac tctgtcacct tctcgatccc 240
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<210> 18
<211> 992
<212> DNA
<213> Homo sapiens

<400> 18

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atgttgacga ggccttttgt aactcagaga gctcttggtc ctgatgggga cttgccctta 180
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tctcacagca cgtccagaag gctaaccacg gtggggagga tgctgacacc agctccaggt 480
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<210> 19

<211> 1795

<212> DNA

<213> Homo sapiens

<400> 19

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ggatttgctg aaattggtgt tgggcatatt agcaaaatat tcttaatttg tggactcgat 1680
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<210> 20

<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (708)

<223> n equals a,t,g, or c

<400> 20

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cgctaagtag tgtgtccggc gccgtgttcc agtcccgcgt tggtccgcga gaaagcgaga 120
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ttcacctacg tcctgttctg gacgttcctc tacggcatgg tgcacgtcta ctgaaatggg 480
ggcccggggg acttttttaa aaaaccagat cgggaggact gtggccagca attaacacca 540
tgtagacttc cttagtctct aagtgggtga attcgtgct tgttctgtaa cgttataaat 600
aatatatatc tgaagacgga gagcctgtaa tattcttcag attaaatgaa gcgtgagaca 660
maaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaccccgggg ggggcccng 709

<210> 21

<211> 649

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (596)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (624)

<223> n equals a,t,g, or c

<400> 21

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aaatgcttcc aagcatgaca acttttaaag aaaaatatga tactctcaga ttttaagggg 180
gaaaactggt ctctttaaaa tatttgtctt taaacagcaa ctacagaagt ggaagtgttt 240
gatatgtwag twcttccmct tgtgtatatt ttaatgaata ttgatgttaa caagaagggg 300
aaaaaaciaa acacaagggt tttccaatt ttaatgctgg ctccatccaa aagtttgccc 360
acaagaatga ataccttccc aaagttgaat aaatttttat ttataaaaact aaggttaaaa 420
tttggttggt tgggttcctt tttaaaacca cgggcttgcc cccttcccac acccccatcc 480
tttgctccta aatgaatcaa aaacattgcc ttgaaataaa ctgaagctta gaantatacc 540
tcctatttat gtccatttta aatttaagga aaaaggggcg aaaattttaa actaanggcn 600
caaaattttg gtttaaaact ccanaatata catgttaaat cctctgcta 649
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<210> 22

<211> 1607

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (820)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (821)

<223> n equals a,t,g, or c

<400> 22

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ttctggaaca cgggctgtac gcaggcgatc ctgtctccaa agtgctgtct aagccgtcga 180
cgggccggac acaccagctg cgcgtgcaact gcagtccctg ggccaccccg tgggtgggca 240
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<210> 23

<211> 578

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<400> 23

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aagcgccatg gcaactgcagg gcactctcgg crtggagctg tccggcctgg ccccgggccc 180
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gcagccgcgg ggagccgcgt gctgcgtac tgtgcaagcg gtcggatgtg ctgctggagc 360
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atccaaggct tatttatrcc argytgagt gatttggcca rtcaggaaa cttctgccgg 480
ttagctggcc acgatatcaa ctatttggct tttgttcagg tggaaggnac cagcatattt 540
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<210> 24

<211> 2756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (20)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (249)

<223> n equals a,t,g, or c

<400> 24

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caagatttta aaagatgtat aagggttaagt ttgcaaatat aatggaaatg ctgtatatct 2460
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aaatthtatt gtgaaattct gcagaattca tttttctatt tccaatattt gctgaggtta 2700
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<210> 25

<211> 2680

<212> DNA

<213> Homo sapiens

<400> 25

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tctaccaaat agccatgatg gactggatgg tcccacttat aagaagcgaa ggttggatga 480
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<210> 26

<211> 1859

<212> DNA

<213> Homo sapiens

<400> 26

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```

<210> 27

<211> 634

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (525)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (561)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (629)

<223> n equals a,t,g, or c

<400> 27

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gttccaggga acagctgctt ctctggggct gggctctact ccctgcagcc cctcgacta 180
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aattattagt gatgtttccg gggatgacna tgcc 634
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<210> 28

<211> 1632

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (926)

<223> n equals a,t,g, or c

<400> 28

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atcaacacca tgagtggcag tcaggagctg cagtggatgg tacagcctca tttcctgggg 240
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agcccgaggg aagaggagcg ccgcccagta aggcgcgagc ggaacaagct ggctgcggcc 420
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```

<210> 29

<211> 2539

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (105)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (936)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (951)

<223> n equals a,t,g, or c

<400> 29

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ggcacacggt gaacagccca tccctggtct catcaattat tcccatcatt caacagatga 180
acggrttcca gactccatca tttctcgttg tgttcagggtg ctcccacgag acacagcctc 240
cctcagcact actccttcag aatcgccctg tgctcagggt acatctcgcc tctctacagc 300
ttcctgcccc acaccaaaaag tccagtccag gtgcagcagc aaggagaaca ttctcagagc 360
cagwcacagt gctgtcgata tcaccaaggt ggctagaaga catcgcatgt ytccttttcc 420
tctgacatct atggacaaag cctttatcac agtcctggag atgactccgg tgcttgggac 480
agaaatcatc aattaccgag atggaatggg gcgagtcctt gctcaagatg tatatgcaaa 540
agacaattta ccccccttc cagcatcagt aaaagatggc tatgctgtcc gagctgctga 600
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tgcaagtaga caagtggag ataccgaact tatcaggga tcagatgatg gcactgaaga 780
actgaagtg cgaattctgg tgcaagctcg gccaggccaa gatatcagac ccatcggcca 840
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tcattattta aaaaaaaaaa 2539

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<210> 30

<211> 494

<212> DNA

<213> Homo sapiens

<400> 30

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ttgaagctga gtttattgag aatggttttg ttacctgctg atagctatct ttttgtgttt 180
agttcttttt gacttctttg gcctctaatt ttttgacagt ggcacttaga tgacagtcag 240
caattgcaac agtgaatgaa atcacacagc ttgagttcaa ggtggaaaga gaaaaaaatc 300
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tcttgctctc gaccttaggg tgtaatgtgg ccctgctcct tgtatgggtga ataacttgtg 420
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ctctgcatcc ttac 494

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<210> 31

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 31

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ttt 1263
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<210> 32

<211> 337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (337)

<223> n equals a,t,g, or c

<400> 32

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tgattttctc cccaaggaag agaaggaaat ccctgctggt tacacagctg cgatgtcaga 180
cttctctga aacatgcact gttgctgcct attagcataa cttcagtcct tcattctctc 240
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tggctcacgc ctataatccc agcactttgg gaggctn 337
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<210> 33

<211> 1742

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1576)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1621)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1724)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1733)

<223> n equals a,t,g, or c

<400> 33

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gcttgctgtc tctcagaatt gttttcttac cttttaatgt aatgacgagt gtgcttcagt 180
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aaccaacaga attttaactc tattaacttt tccaaatttt cctatgcttt tagttaacat 720
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<210> 34

<211> 1166

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (965)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1090)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1094)

<223> n equals a,t,g, or c

<400> 34

ccggaatgaa aacaaacggc ggccgctgcc gagtccgggc actctgctgg tcgcggcggg 60
agtggcgtgg cgcagggatg gcacaaaaga aatatcttca agcaaaattg acccagtttt 120
taagggaaga caggattcaa ctttggaac ctccatatac agatgaaaat aaaaaagttg 180
gtttggcatt aaaggacctt gctaagcagt actctgacag actagaatgc tgtgaaaatg 240
aagtagaaaa ggtaatagaa gaaatacgtt gcaaggcaat tgagcgtgga acaggaaatg 300
acaattatag aacaacggga attgctacaa tcgagggtgtt tttaccacca agactaaaaa 360
aagataggaa aaacttgttg gagacccgat tgcacatcac tggcagagaa ctgagggtcca 420
aaatagctga aacctttgga cttcaagaaa attatatcaa aattgtcata aataagaagc 480
aactacaact agggaaaacc cttgaagaac aaggcgtggc tcacaatgtg aaagcgatgg 540
tgcttgaact aaaacaatct gaagaggacg cgaggaaaaa cttccagtta gaggaagagg 600
agcaaaatga ggccaaactc aaagaaaaac aaattcagag gaccaagaga ggactagaaa 660
tactggcaaa gagagcagca gagacagtgg tggatccaga aatgacaccg tacttagaca 720
tagctaacca gacaggcaga tcaatcagaa ttcccccatc agaaagaaaa gcccttatgt 780
tagctatggg atatcatgag aagggcagag ctttcctgaa aagaaaagaa tatggaatag 840
ccttgccatg tctgttgga gctgacaaat atttctgtga gtgttgca gaagctgctgg 900
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aacanctgga atgccttgat gatgcagaaa aaaaattaaa cttggscag aaatgcttta 1020
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tcacattatn ggncggtga gtccatttct agcatttgtg tttattcctg ttaaagtatt 1140
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<210> 35

<211> 1049

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<400> 35

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gatgggtgcc cccggcngca ggaattcggc cagcaggntg gtgctggggc ttcttctcct 60
gaaggggctg caagagggaa ggcttagcca tgcgtcctt gatcagaagg gtgatcagca 120
ccgcgaaagc cccagggggc attggaccct acagtcaagc tgtattagtc gacaggacca 180
tttacatttc aggacagata ggcatggacc cttcaagtgg acagcttgtg tcaggagggg 240
tagcagaaga agctaaacaa gctcttaaaa acatgggtga aattctgaaa gctgcaggct 300
gtgacttcac taacgtgggtg aaaacaactg ttcttctggc tgacataaat gacttcaata 360
ctgtcaatga aatctacaaa cagtatttca agagtaattt tcctgctaga gctgcttacc 420
aagtgtgctg tttacccaaa ggcagccgaa ttgaaattga agcagtagct atccaaggac 480
cactgacaac ggcataccta taagtggggc cagtgtgtgt tagtctggaa ttgttaacat 540
tttaattttt acaattgatg taacatctta attaaccttt taattttcac aattgatgac 600
agtgtgagtt tgatgaaaat atctgaagct attatggaaa taccatgtaa tagggagagt 660
tgaacatgaa tattagagaa ggaatccagt tactttttta aattacacct gtgtgcacct 720
gtattactga atataggaaa gagataccca ttacatagtt actcagtaaa caaaagagaa 780
ataccaggta ggaaagaaga gttactattc ctgagaaata atcaagaaca tatttaattt 840
aaactaatga tgtgaactat ttagttttga tgtccgttat gtgattctgc ttttacttga 900
gtaaaattaa agtggttttaa tttgagatca aggagaagat agtggaaaca aatgttatat 960
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aaaaaaaaaa aaaaaaaaaa aaaactcga 1049

```

<210> 36

<211> 489

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (383)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<400> 36

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gtttgttgcc tgcttgtttt aatgttctgg cttgaggcag cgagcccttg actatgccac 60
attgccagga ttttgcaggt tagattgtac tacagcactg cctttggctt gccagactct 120
ggagtcccca ctttttcac cgtttctcag gaaaacactt tgaccactt gaagctctga 180
gctactgctt cacagcttcc tggggtcagt ctccagccaa aaccatagat atcccaamwg 240
cagccaaacc acggctctgg gcgaaggaa gattagggtt actstaggtt tccacaccct 300
gatgctcctg gcctttaatt tgacaactct ggactgccag gttttcacag acngttggac 360
atggattcaa gattgggaat gtnangggat ggtttgcaa cagtgtttgc tttgagcagt 420
tttaaaattt ggccaggaga ttcattgtgag caagaaatgt tagataccag ttttttgggg 480
tcaagggggg                                     489
```

<210> 37

<211> 598

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (595)

<223> n equals a,t,g, or c

<400> 37

```
gactcccaga gtgctgggat ttcagggtgt agccactatg cccagcctaa tacgtggatt 60
tttaaagctt caggttctgg ttcagaagtt tcctgggtct cattaaaata atgaggcact 120
cagaattggt ctaataaaaa taacgaccat ttctttctac tccagtctct ttcacaaact 180
tcttagtgaa aatgacaagt gaggcccttc agtaggggca ttttcagtgg agataatagc 240
ggcagacctg agaccttggg ctaggtagtt tattctcatt tctgaacaga tgatgaattt 300
tctcagatga ccctaagaaa ttgttttacc aaaaacaaag tgatctatct gctttgggag 360
gaactccctt ccttttggtt ctcttccctt ccccccttcc cctgcgggtt tagagccctg 420
tctgtccggt cgtggttctg tccagccatg atccgggagt cctagcttgc taatggamca 480
cctgagatgt tccttatggc tcaaggctwa aattgaagggt gggaaccacc tgaagcctcc 540
gtgggggagg cttgsgggag gttwggccta aargcattag gaagatacta gcttnagg 598
```

<210> 38

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (725)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<400> 38

```
gtctttggga actcaaaaag ttatctgtgc attttcatcc ctccgtggcc ctttttgcaa 60
agaccatcct tcagggaaac tatattcagt attcagggga cccactgcag gatttcactc 120
taatgagatt tttggatcga tttgtatacc gaaatccaaa gcccataaaa ggcaaagaaa 180
acacagatag tgttgtgatg cagccgaaaa gaaaacattt tattaaggat attcgtcatc 240
ttcctgtgaa cagtaaggag ttccttgcaa aagaagaaag ccaaatacca gtggatgaag 300
tgtttttcca caggtattat aaaaaagtgt ctgttaaaga gaaacaaaaa cgggatgcag 360
atgaagaaag tatagaagac gtggatgatg aagaatttga agagctgatt gacacatttg 420
aagatgataa ctgtttcagc tctggaaaag atgatatgga ttttgctgga aacgtgaaaa 480
agagaacaaa aggagctaag gataacacat tagatgaaga ttcagaagggt agtgatgatg 540
aacttggtaa cctggatgac gatgraagtt tctttaggga agtatggatg atggaagaat 600
ttgctggaag ttgatggaag atgggaggga acattycatg ggatgtgttt agatggatgg 660
aaagtggaga gtgtttccag aacttggaag ttccactccc aaagtccagt accaaggaaa 720
agccnagagn aaaagggtac cagtggattt ttggaccttg gc 762
```

<210> 39

<211> 1958

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1885)

<223> n equals a,t,g, or c

<400> 39

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tcgagttttt tttttttttt ttctcgtgag cttaggccgc tggtttttgt gattttttgtc 60
tgattgcaat gtctggacgt ggtaagcaag gaggcaaagc tcgcgccaaa gcgaaatccc 120
gctcttctcg cgctgggtctc cagttcccgg tgggcccaggt gcaccgcctg ctccgtaaa 180
gcaactacgc agagcggggt ggggcaggcg cgccggtgta cctggcggcg gtgttagagt 240
acctgaccgc cgagatcctg gagctggccg gcaacgcggc tcgcgacaac aagaagactc 300
gcatcatccc gcgccacttg cagctggcca tccgcaacga cgaggagctc aacaaactgc 360
taggccgggt gaccattgct cagggcggcg tccttcctaa catccaggcc gtgcttctgc 420
ctaagaagac cgagagtcac cacaaggcca agggcaagtg atttgacagg tatctgagct 480
cccggaaaac ctatcaaacc caaaggctct tttcagagcc cccctaccgt ttcaaaggaa 540
gagctaacct cactgcttgt aggtagaagg aaaaaaggca ctaagggtgc aaaagcttct 600
catttcagag agatgccagg atcctaagt cctgccaaac ttaccaattc taaggaaata 660
gtggatggat ggcattactg attcctacat tactgattga ttctgcatcc gcaaattgtt 720
ttattaaana cattctacat catgtgtggg gagataagga ggataaaatg aagagaaaga 780
atattattga ggggaagtgc ttctgaatac aaaatgtgtt taatttttta aataagtatt 840
acattcacag ggttcaaact atttgaagta aagagattat atataaagaa tccatccctc 900
aacttaccga ggtggtcact tttctttttc ttgtgtatct gccagattatt cattcctgct 960
```

```
gatatcagtc aataatgaat gatacgtgtt ttcttcactt ttttcattct tgtcaggtag 1020
cagactgtgt agacttttct gcacttgccc ttttcataac aatctatctt ggagaacttt 1080
ccctatgaga acatacagag cttcctgtac acagttgcat gtactgcatt atgcaaatgc 1140
attatatatt atgtaacctg tccactgttg gtaggcactt gagttgtttt agtcttttgc 1200
tatcaaacag ttctgggatg attaaccctg atttactgca aaattgaaat tgcctctgcta 1260
ttctgctgga atggtggtaa gtgaactgaa aattccagtc actcttgggc tagactcaac 1320
gttcttaaaa actatgtggc catcaccaaa ttagttatatt tgaaccttaa tttcttcacc 1380
tctaaaatgg aggtaatact taccttaagt ggctatgaga atgaagatca tgtgtatgaa 1440
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ctatgtgtaa tttcttaatt ttgaaataat tttatttgta atgtgcataa tcttatttaa 1560
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ataaaaggta atgcaaaggg araggaaagc atgtgtcatt aattttctgc ctaggacacc 1680
tccctggtta aattgccatt tcctttcttc cttgcataat gattaggaaa cacatcctcc 1740
tgacctgcct gccctctttt gcctactttt tcatctgcag tcaaggctct gttttaagac 1800
tgactgttac ttttacaat ctgtgtgtat tggtnggcta agggcctgta tgggtccact 1860
gctgtattcc caggggccca gcatnggkgc ctggacgctg cckgggcaaa tagtagtcac 1920
ccgaggaaat gggctggatg gaatttcatg gagggcct 1958
```

<210> 40

<211> 477

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (246)

<223> n equals a,t,g, or c

<400> 40

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gcccangtet ccgcttnccc cgtcttgtac acccctaact cctgaggetc ctccgaatca 60
cgcganggaa agcggagaag ctcaagtggc cgccatgtca gaggcttatt tccgagtgga 120
gtcgggtgctg ctggggcctg aggagaactt tctttctttg gacgacatcc tgatgtccca 180
cgagaagctg ccggtgcgca cggagaccgc catgcctcgc cttgggcttt cttcctggag 240
cggagnaagg cgccgagact gacaacgcgg tcccacagac ttttatcgga cgttttcgcc 300
gcatcatgga ctctcacag aatgcttaca acgaagacac ttcagccctg ggtagccagg 360
ctagacgaga tggagagggg cttattttcaa acagggcaga aaggactgaa tgactttcag 420
```

tggtgggaga aggggcaggc ttctcagatc acagcttcca acctcggtca gaattaa 477

<210> 41

<211> 860

<212> DNA

<213> Homo sapiens

<400> 41

```
ggcgacgagc tcgtgccgaa tcggcactag tggaggatgg gcttctcgag gggtctctgc 60
ttcactaact cccgagagaa ctcccacagg ctcttcctgc tggtgcaagc ttttgggggt 120
gtggacgtgg ctgagttctc ctgcgcgtac gggcctggcc agaggaggat gatcctgaag 180
cagtttgaac aggggaagat ccagctgctc atcagcacgg acgccaccgc gcgaggcwtc 240
gacgtgcagg gtgtggagct ggtggtgaac tacgacgccc cccagtacct gagaacctac 300
gtgcaccggg ttgggaggac agctcgcgct gggaaaactg gacaggcctt cacactgctc 360
ctgaaagtgc aggagaggag attcctccga atgctaactg aagctggggc acctgagttg 420
cagcggcacg agctctccag caagctgctg cagccgctgg ttctcggta cgaggaggcc 480
ctgtcccagc tggaggagtc tgtcaaggaa gagcrcaagc agaggcgggc ctargctggg 540
gctcaaaggg ccggaggggac tkaacgctca ccaccctgac cctycttyca gagcagtgtc 600
gatcactgga tcctgtatgt gaggaaagga atccccagc ggacacagcc ttctcccca 660
agcacgtggt ctctgcgcca ggcagcccgg gcgtcagagc tcaagcacct gccccgactg 720
gagacttcag ggcttgtcac ttctcagagt tggaggctcag gatggctgcg ggcaatgaag 780
ccttagtaaa acggtgaaaa gtactcccag acggacgcgg gcacccgtca tgcttttgct 840
gagagttggg ggcattaacc 860
```

<210> 42

<211> 1131

<212> DNA

<213> Homo sapiens

<400> 42

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aaactagtgg atcccccggg ctgcaggaat tcggcacgag cagcatcagc cttagaacaa 60
gaaccttacc ttcaaggagc aagtgaagaa ctctgtgaag gatggaactt tcagatatca 120
actattttaga gtccagaggg agccatggca ctagaaatag ttgataatga aatgagattt 180
tatgaagtat accgctccac ctatgagcgt ctgtctctgt gggcttgagg tgtaaacagg 240
agccaaaagg agggaaaagt tgaagaataa agtagatctg agaaattctg agccaatcag 300
gcttcttaat tcaagagaca aaccaagacg ttctgtcaac tgtgctgtgc tcttctttaa 360
gccaatgaac cccaattcct ggcagtctac aagaagtctc ttaatgctaa tgaagaattt 420
aaagggtctt ttaaggaaat gaagggtctt ccaaatagaa tgatttactc tgaagaaaca 480
aacaatggta tctctgaaac tcacaacctc aagcccaatc ttgaaaatat gttgtgcacc 540
aagacgactg cttcagcttc ttctcttatc cttactttct ttaatagata ttatttaaac 600
tgtccagtga aaagggtgcca caatgcccag tattgtaaac aacagggttg cattcatgaa 660
gctttcattc attctggagt ctactaattt acctgaatgg tgtttgcatt ctgtgaaatg 720
cctctccacg ttgcatatgt cacacttttg tctgcacata actctttttt cacaagaagg 780
gtcactgcca caacagcaca gtcagcgggt gaattacagg tgccctgctgc ctgcctacct 840
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atgtcagtga ccagatttgt ggcttataaa cattagcagt ttatttatgt tttaaagtgc 960
aaagatgtgt gtttgatatt cactttaata attagaaatg gatcttgtaa acagggcata 1020
tatcaaagat gaccttataa tatgtacccg aatatacagt tcaagaattt tgtctgactg 1080
gaaataaatg cattttgtag caaaaaaaaa aaaaaaaaaa a 1131
```

<210> 43

<211> 1334

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1019)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1204)

<223> n equals a,t,g, or c

<400> 43

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acgaggsaac tagttctctc tctctctctc catgaccccc cagcttctcc tggcccttgt 60
cctctggggc agctgcccgc cctgcagtgg aaggaaaggg cccccagcag ctctgacact 120
gccccgggtg caatgccgag cctctcggtg cccgatcgcc gtggattgct cctggaccct 180
gccgcctgct ccaaactcca ccagccccgt gtcttctcatt gccacgtaca ggctcggcat 240
ggctgccccg ggccacagct ggccctgcct gcagcagacg ccaacgtcca ccagctgcac 300
catcacggat gtccagctgt tctccatggc tccctacgtg ctcaatgtca ccgccgtcca 360
cccctggggc tccagcagca gcttcgtgcc ttccataaca gagcacatca tcaagcccga 420
ccctccagaa ggcgtgcgcc taagccccct cgctgagcgc castagcagg tgcagtggga 480
gcctcccggg tccctggccct tcccagagat cttctcactg aagtactgga tccgttacia 540
gcgtcaggga gctgcgcgct tccaccgggt ggggcccatt gaagccacgt ccttcatect 600
cagggtgtg cgcccccgag ccaggtacta cgtccaagtg gcggctcagg acctcacaga 660
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gcaagggtt cccgctgcct ccagacagca cctgggtcct cgccacccta agccccggga 780
cacctgttgg agggcggtat ggatctgcct agcctgggct ggagtccctg ctttgctgct 840
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gactgaactg tcaactgtgag atatttttta ttgtttaatt aggaaaagaa ttgttggtng 1020
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agcttraggc caggagctyg aaaccagtcg gggccacaca gcaagacccc atytctaaaa 1140
aattaatata aatataaaat aaaaaaacgc ccatagtcac acaaagcccc cgcaccaata 1200
ggancctccc gaatcaacct tgaccctctc ctttcataac ctaacctgac tagaaaagct 1260
attacataaa acaatttcac agcaccaaat ctccacctcc atcatcacct caacccaaaa 1320
aggcataatt aaac                                     1334
```

<210> 44

<211> 2351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1106)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2324)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2331)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2350)

<223> n equals a,t,g, or c

<400> 44

```
gaacatttgg ggcagggggt aaattttgcc agtttgagca tcatgagggtg taacaagaaa 60
tggggtgaat gggccaaatg caaggagtgc atctctgggc tgcaaactga cttgagtgtc 120
gcactattgc tattccgtgc aaacaaaact cagcttttcc tgactcagtt ccttgactta 180
gtggccttta caaaaaaagt tgagtagtgt gtggcctgct gtcgcacagc ccctagttag 240
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cttgctccat ttcactgaag gctttgctgg gtgaaaacac ttcagcatct cctcctcagg 420
tcaaccata aagaccaggt ccagcacctg ggtcttggca catccctggc ctcaggccct 480
cacctaacag tgaggcagca gctgcccagc cccgcaatgt gcctgctgtc aggcagctct 540
tgcttgaac ttacttccac attctttcct gatgggcagg tggctgaagg cccagccatc 600
agtgtcgctt gttgccaccc cgtgcctccc ttggcctctc tgagctttgc ccagaagacc 660
aacaatcata cataccctaa ctgggacacc actctgcaga atgcagatga tccattctgg 720
aggaagctgt cccttgagct cagttagctc ccaggcaagc agggcatctg gccgacttcc 780
ctcacaacag ctgctccac atccctcgg actggagctt cagccctgac tgagggtggg 840
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cagggccaga gcataccacg tctgcagtgc ctgtgagcag agccagcagt tgccctgtga 960
ctgtaaccac caattgtcc aaacacccgc tgcaattagc aagaagggtg ggcttcaccc 1020
tcctttactg aggagaatga tgcggaggag ttctctctcc agggctaggc aaggcaggcg 1080
agcagccaga agccgggtgc ccacanggca gggacaggaa ggctgtgctg ctactggctg 1140
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tctcgctgct ttcacagctg caacgattgt gtctgcctca tggggttttc ctccagagcc 1260
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taccctgtgt gggcggcacc tcagggacag taaatcagaa atgctgggtct tgaaaccttg 1380
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ggtattctaa cgtttcctct ctgtatttca tgaagctgat ttctctctc tttccttttc 1500
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cgtgcatgtg cgttttttagc aacacatcta ccaaccctgt gcatgactga tggtggggaa 1620
aaagaaaagt aaaaaacttc ccaactcact ttgtgttatg tggaggaaat gtgtattacc 1680
aatgggggtg ttagctttta aatcaaaata ctgattacag atgtacaatt tagcttaatc 1740
agaaagcctc tccagagaag tttggtttct ttgctgcaag aggaatgagg ctctgtaacc 1800
ttatctaaga acttggaagc cgtcagccaa gtcgccacat ttctctgcaa aatgtcatag 1860
cttatataaa tgtacagtat tcaattgtaa tgcattgcctt cgggtgtaag tagccagatc 1920
cctctccagt gacattggaa catgctactt tttaattggc cctgtacagt ttgcttattt 1980
ataaattcat taaaaacact acagggtgtg aatgggttaa atgtaggcct ccagttcatt 2040
ttcagttatt ttctgagtgt gcagacagct atttcgact gtattaaatg taacttattt 2100
aatgaaatca gaagcagtag acagatgttg gtgcaatata aatattgtga tgcatttatc 2160
ttaataaaat gctaaatgtc aatttatcac tgcgcatgtt tgactttaga ctgtaaatag 2220
```

```
agatcagttt gtttctttct gtgctggtaa caatgagcgt cgcacagaca tggtttcagg 2280
taaataaatc tattctatga taaaaaaaaa aaaaaaaaaa gggnggcccc nctaaggggg 2340
ccaagcttan g 2351
```

<210> 45

<211> 1587

<212> DNA

<213> Homo sapiens

<400> 45

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ttttgcaaaa tgtgcttatg tgacactata gaaggtacgc ctgcaggtag cgggtccggaa 60
ttccccgggtc gacccacgcg tccgcccacg cgtccggccc catcacacct ggccgatttt 120
tatttttttgg tagagatggg gttgtccagg ctggtctcaa actcctgagc tcaagcaatg 180
tgcccgccctt ggcttcccaa agtgctggga ttataggcgt aaaccactgc acgcagccta 240
ccctctgcct ttttaagatg atgtatttat ttaatttttg ccatcattgg tgcttcacct 300
tcctgcgaag gaaattccag agcctgtatt taagctacct aggcttttac actcccttta 360
ttgcctttcc aaatagtatc tcatttggtg tactctagtg tcctatacct cttggaaacg 420
aaagaggggc caacctacaa ctaagaaggg acaaaccttg aactaagtaa gaccttacac 480
acccagaaag aacctgggc cctccttctt cagggacaat gcagtagcca cttggcctgt 540
ggaatttact gaaggctatt tcctgtaact tgctagttaa cttagttttg tatttcaggc 600
agaggtgcgc tctgtaatgt tgggcctttg acttcacagt actggagagc tgttcacaca 660
gatgtttaga cctttctctc tctctctctc tcttttcttc tttctcaaca actctttcac 720
agaggcagtc attttgaaag gttgaaatat ttggccttta ccaaagagct ttttttttcc 780
ttaagcaaaa tcctttcaga aagaaacaaa tggggaaggg cagattaaga atgcatatgt 840
cccaatccac ttctatagga gtttaatcat attcacatga gtaaaatgat ggaagaactc 900
tttaaggtaa tcctttggga taaaggatcc tgggaagttc tctcaggtaa agaaagctta 960
cagcagattt gtaatatatg tctggagagc tatttataag aaatttaaga ggattgtttt 1020
gttttccttt attaaagatt taagcctttt tactttgcaa aaagaaaact acaaaagtgt 1080
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atgtggttac gttttgctac attagaattt gaaaatgcaa tatgtgtggt aaatctactg 1200
tttgaaattt ataatggtct ctgatatgat tcgaattttg gtaacttttg aaagtatttt 1260
tcccccttta gtcattgatt tctatttgtt ttttaatggt aatttttcta gaaagcatct 1320
gaattgacta ggcttttcct atataaaaaa ctcaaaactt gttaactctg tactttaata 1380
aaatttaaaa ttaaaactgt gttgtttttt tctcttctgc tagatacata tataattaaa 1440
gtactcaagt tagttgtttt gcagagatgt tgccctcaga tgttaatcag gtctctcaag 1500
tttcatggag tctatgctga tcctttaatt gacaaataaa agatatatat ctgtggtgtg 1560
caaaaaaaca aaaaaaaaaa aaaaaaaa 1587
```

<210> 46

<211> 379

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (345)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (351)

<223> n equals a,t,g, or c

<400> 46

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aattcggcac gagaatcact ggggtggett ccccatgctg ttctcttgat agtgagttct 60
catgagatct gatggctttg taagtgtttg gtagtttttc ctgtattcat tctccctcct 120
gccaccttgt gaagaagggtg ccttggttcc cctttacctt caaccatgac tgtaaatttc 180
ctgaggcccc cccagccatg ggggactgtg agtcaattaa acctctttcc ttataaaatt 240
acccagtctc gggcagtttt cttatagcag tatgagaatg gacttaataa aggtagggtt 300
aaaaagtatg gctkgggcat ttagctcaa cacctgtagg tcaanagcta nctttgggtg 360
ggctgaggca ggagggacg 379
```

<210> 47

<211> 1920

<212> DNA

<213> Homo sapiens

<400> 47

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catcatcgta tcaattgtgt tcatctatat cattgtttca cctctctgtg gtggatttac 60
atggccaagc tgtgtgaaga aataggaaag aagaagttac cattaaccaa ggatatgaga 120
gaacaaggag ttaaaagcaa tccatgtgac tcaagccttt cacatactga cagatggtat 180
ctgccagtct cttcaaccct cttctcactt tttaaaatct tgttccatgc ctccagggtt 240
atctttgtct tatctaccag tttattcctg tgaacttcag attgaaccat tcattgcagc 300
agtagcctta aaaaggcttt tgtttatttc tttggtttgt taactagtgt catctattta 360
gagaaacatt tttgttttta attgctcaaa gctgtcgccg ctagtcttat gagctatcta 420
ctaaaactat ggagaaactt tgtatgtgca cacaaaagta ttcaagagac agtattgcta 480
acatctcatc ttaatgtctt ttgttattga gaagttttag gtgcttcaaa acaatataaa 540
tggaataatg ttgttatttg gggaattgta atgatgttgg tgctgcttcc ttctaagagc 600
tcagacaagt aaagtatgaa acattcttat ttcagttaga tggggaacat tttgctagcc 660
cattagaagc acacagaatt atccttgtcc tctaataatt gactttcagg aataaagttc 720
agtgtgctga tcattcacaa tacagtggat agcttgatat cttctgtttt cccattgcag 780
ttgatttgag aagatgaagg tttaaattatt gttgaaagtt gcagtttttt aaatgtgttc 840
ctttttcttc tgtgaatatt tagggcaatc gtgtcgctaa tagaatatgt agtagagggg 900
gtggggaggt aaattcctct gacttgccaa agaaaaagaa ggggaaccaca gtggatatgc 960
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cccaaaccga atacggtcag cagtcaactc cagggttttg gcttgattcc tgttgaataa 1080
tagttttgag cattctttgt ggttaaataa attcttaaat ctgcctagtt ttgatgaatt 1140
cttttgtgaa acttgaaaga gaatagacag tatgacatat agaattaata caaacagtt 1200
taacaaccat ttaactgcag tgtaagaaaa ttggactgta atcatatcgc tactggcatc 1260
tgttatctag tatgcatttc tgggtgtgtat ctgaaaggaa gacattttct accctagatc 1320
caattgcatt tatttatcaa taagtgccat taaattgaaa ttatattaca ttttacactt 1380
tctcaatgaa tgaacaaatt agtctgtaga atctagccac ctgtttagcc tagtcatgtg 1440
ccttgaacat atatgtgtcc cataatctgg ctcatggtac ctgttcttct atccaaacct 1500
ttcaattcat gctacctgat tcatttattt gacatagatc ttaggcccac ttgaactctt 1560
ttcttgttta tctagcatag cacaaacggt tttccagtct tctttatcaa cactaatgcc 1620
tcttaattgc atcagtattt cctattggaa aatacatctg ttccagaaaa acatttggca 1680
ttcctgaata atttccaaat gtttttaatc caaagaaaaa ggtttaaagc ttatttccct 1740
ttcttataca cacctgaata aaattgatgt gcatgtttta gggatcaatt acctaactgt 1800
tccttggctc atttatgtat aagaatgctt tttaaagcac atgtctcatt ttaaattgacg 1860
cacaaactga agatgttaat aaaatttaag agtaatacaa aaaaaaaaaa aaaaaaaaaa 1920
```

<210> 48

<211> 319

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (306)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (317)

<223> n equals a,t,g, or c

<400> 48

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ggcacgagcc agaacaaaaa gtacaatagc tgttgctcaa ttgctagtca aataacttag 60
cactggggaa ttccmgatgt tacttaggga attttatact ggtgcatctc aataaagaac 120
tgaaagtaag cacaagaaga aaaaaagcct tatctttgct ctagattttg caaaggggaa 180
atttcaacag aacgcaatca ttgctacacg tctgccaaga cacaaggctt gggcgatctt 240
ttttgttca tttgttttgg atacttagct agtttttctt aaatgtatac cattggaggg 300
ggatanctgg gccttttngg                                     319

```

<210> 49

<211> 278

<212> DNA

<213> Homo sapiens

<400> 49

```

gacggatgaa gagatcgcgg cgggtggagcc gttacaaagc gttgaacgcc ggacgtacca 60
gtaagcgtat tcataaaggc ctggtggtgc gtaaaggctg gctgggtaaa ctgccttcat 120
taccgcttcg ctggcgggcg cgtggagtga tgaccctrat gtttatcttg ctggcggcc 180
tgctttggtt tgttgctgcc ccggtggtga cgtatatcct ctgtgcgtta gtggtattgt 240
tggcagcgcc tgttttgaat ggcagattgt acgcccgt 278

```

<210> 50

<211> 652

<212> DNA

<213> Homo sapiens

<400> 50

```

ctttctcacc actctcctgc tagccatctc tttggcacta aggccctggt caaattggat 60
ttctttcatt ttccacact tcaaagacct atgttctagg tattctccat agggatagtc 120
tctttggcat ttatttggtt tttctacggt ttcagtccca tttactccaa gactcactcc 180
ctgccacctt gtgcatcaga tacagctact tctggctgac ttttcaaggg ggaccacctt 240
acctgtcatc tcttacttgt tcagaaatga ctgtgtcagt ggcacctcaa actcccttgc 300
tgtccttttc caaggagaca gctaagggtg atggagatgc agaattggacc tcacgttcgc 360
cctagtcaag actgataccc tttccgtttc agaggattgc caagaaaaaa ctcacagtgt 420
aggcaggggt ctctgaggtc ggctgcggtg tgggaggcac gsctgggcmt gctctctggg 480
ctggagcagg tggattcgaa ggctgtctta gcacgagggc ccaaaggctt tctcagtggc 540
cagtagctct gccgcctttc ccagagaggg ggtccagggg acatcctgga aggctggggc 600
ctggggccacc ttctgctctt gcaagctaga gccagcccaa tagggggcgg at 652

```


<210> 51
<211> 943
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (140)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (786)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (843)
<223> n equals a,t,g, or c

<400> 51
gctttgcaac agatcgcttc ttcaaatgct ggcacaacgc ccagagctcg atgagagAAC 60
agcccatctt caccaccga gcgcatgtct tccagattga cccaacacc aagaagaact 120
ggatgcctgc gagcaagcan gcggtcaccg ttctctactt ctatgatgtc acaaggaaca 180
gctatcggat catcagtgtg gacggagcca aggtgatcat aaacagcaca atcacaccga 240
atatgacctt caccaaaacg tcacagaagt ttgggcagtg ggccgacagc agagccaaca 300
cagtgttttg tttggggttt tcctctgagc agcagctgac aaagtttgca gagaaattcc 360
aggaggtgaa agaagctgcc aagatagcca aagacaagac gcaggagaaa atcgagacct 420
caagtaatca ttccaagca tccagtgtca acgrgacgga cgatgaaaag gcctctcacg 480
ccggtccagc caacacacac ctgaagtctg agaatgacaa gctgaagatt gccttgacgc 540
agagcgcacc aacgtgaaga agtgggagat cgagctgcag acccttcggg agagcaatgc 600
acggctgacc acagcactgc aggagtcggc agccagtgtg gagcagtgga agaggcagtt 660
ctccatctgc cgtgatgaga atgaccggct ccgcaacaag attgatgagc tgggaagaac 720
aatgcagtga gatcaacaga gagaaggaga agaacacgca gctgraagag gaggatcgag 780
gagctnggag gcagagctcc gagaaaagga gacagagctg gaaagatctt ccggaaaaca 840
aantggaatc mtacytscag ctctgttca gattgcggat tttgtctctt gagaagctag 900
aggcgggcag agagagacat tcaaaacttg gaagacaaat gcg 943

<210> 52
<211> 832
<212> DNA
<213> Homo sapiens

<400> 52
gcgtcgacat agaattgaag ttgctcgtca gctgattgaa gataaggaga ttggcctgga 60
ttatccaggt aggtcaatg taatcaggaa gggcctttaa agtgagagag ggagsgagaa 120
gaggaagtca gagcgatgtg ctgtgaaatc tactaccgtt tgctgggttt gaaaatggag 180
aaaaagagtg aggaactgag aaacatggat ggccttgga acgtggaaaa gggtcactga 240
aatgggacga catgaactca aggaggctat ttatgaccat gtcatttgca acatgaagaa 300
agcttatctg gagtgaaagt aaatgagacc aacagagatr agagaccgg agaaatcctg 360

```

gttacctgctc ttgaatcctg tcagtcctat actggagctc tgtaataca aaataatagt 420
aataatccct ctgtttctta tgtttatgcc aacttcaaca aaaagaaact tgactaagag 480
acaatataag aayttaatgt gtaattaaga aagaactctc caccacgggg aatgtgaaag 540
gtatatgagt cccttttcac gatgcatgt catgtctttt aaataagcca tactttatgt 600
tcaataaaaa gagaataagc aggattcgcm agagaacaca atcccttttt aactgctggg 660
aagatacytt tagtcattaa tgrctggacg acaatttggg rcacmtatat ggatattggc 720
cggtttgtga tgatgtgatt gggcctctaa gtgacaacat tgttccctgt atagagtga 780
tggcaagtgc atttataaaa ttggccatca tggctgttaa atttaaaaaa aa 832

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```

<210> 53
<211> 1554
<212> DNA
<213> Homo sapiens

```

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<400> 53
agcgggcctg gagttcagtg ggtgcagcct gcttgcragc tgaggccaga caggggggag 60
cctacggacg gawaaggagg agcattgcag gccgagacgc cctcatcagc agagtcacag 120
gagttttggg aagtgaagag aaaagaaaag ttgattacaa acgggacatc attttgcttc 180
gaaatggaac cagcagttag cgagccaatg agagaccaag tcgcacggac tcatttgaca 240
gaggacactc ccaaagtga tgetgacata gaaaagggtta accmgaatca ggccmagaga 300
tgcacagtga tcggtggctc tggattcctg gggcagcaca tgggtggagca gttgctggca 360
agaggatatg ctgtcaatgt atttgatatc cagcaagggt ttgataatcc ccagggtgcg 420
ttctttcttg gtgacctctg cagccgacag gatctgtacc cagctctgaa aggtgtaaac 480
acagttttcc actgtgcgtc acccccacca tccagtaaca acaaggagct cttttataga 540
gtgaattaca ttggcaccaa gaatgtcatt gaaacttgca aagaggctgg ggttcagaaa 600
ctcattttta ccagcagtcg cagtgtcatc tttgagggcg tcgatatcaa gaatggaact 660
gaagaccttc cctatgccat gaaacccatt gactactaca cagagactaa gatcttacag 720
gagagggcag ttctgggagc caacgatcct gagaagaatt tcttaaccac agccatccgc 780
cctcatggca ttttcggccc aagggacccg cagtgggtac ccacctcatc cgaggcagcc 840
aggaacggca agatgaagtt cgtgattgga aatgggaaga acttggtgga cttcaccttt 900
gtggagaacg tgggtccatg acacatcctg gcggcagagc agctctcccg agactcgaca 960
ctgggtggga aggcatttca catcaccaat gatgagccca tccctttctg gacattcctg 1020
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gcctactacc tggcctcctc gctatcctct ctggtgatgg tgatcagtc tgatcatccag 1140
ctgcagccca cttcacacc catgctgggtc gactgggtg gcacattcca ctactacagc 1200
tgcgagagag ccaaaaaggc catgggctac cagccactag tgaccatgga tgatgctatg 1260
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atcctttgaa tgagtttgct ctgagcctgt gactccttct gctaggcaga gagcgacccc 1440
tactctttcc gtgacgatga gggcggaaca aacagacatt tcttccttca tggaaactgga 1500
tttggaattc ttgaagcagg cagcttcata ttataccgat ttgttctctg tcaa 1554

```

```

<210> 54
<211> 281
<212> DNA
<213> Homo sapiens

```

```

<400> 54
agctattttac aggtttttaag caaatgatta tgtctgtgtt ttaaagggtat tatattctag 60
atgcttcatg gaattacgtc atttatactt tataaatcta taatgtgtam tgaatataaa 120
acaagcttgg gaaacataaa ctcaagttag aaaatatggg ttgacataa aaccttaaat 180

```

atgtttcatt tgtttgcttg tttggcttgt ttgtttctaa cacaagttta acctacatgt 240
gagtcacctt tgggattgat gagtctagrg tttgaaacca g 281

<210> 55

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (770)

<223> n equals a,t,g, or c

<400> 55

gcgtcgaccg gagagctgtg tcaccatgtg ggctcggttgt cttcctcacc ctgtccgtga 60
cgtggatttg tgagaggggc catggttggg gggatgcagg agagggagcc agccctgact 120
gtcaagctga ggctcttttc cccccaaccc agcacccag cccagacagg gagctgggct 180
cttttctgtc tctcccagcc ccaactccaag cccatrcccc cagccccctcc atattgcaac 240
agtcctcact cccacaccag gtccccgctc cctcccactt acsccagarc tttctcccca 300
ttgcccagcc aactccctgc tcccagctgc tttactaaag ggggaagtcc tgggcatctc 360
cgtgtttctc tttgtggggc tcaaaacctc caaggacctc tctcaatgcc attggttcct 420
tggaccgtat cactgggtcca cctcctgagc ccctcaatcc tatcacagtc tactgacttt 480
tcccattcag ctgtgagtgt ccaaccctat cccagagacc ttgatgcttg gcctcccaat 540
cttgccctag gatacccaga tgccaaccag acacctcctt cttcctagcc aggctatctg 600
gcctgagaca acaaattgggt cctcagctct ggcaatggga ctctgagaac tcctcattcc 660
ytgactctta gccccagact cttcattcag tggccacat tttccttagg aaaaacatga 720
gcatccccag ccacaactgc cagctctctg attccccaaa tctgcatccn tcttcaaaac 780
ctaaaaaaaa aagaaaaaaaa aagtcga 807

<210> 56

<211> 656

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (545)

<223> n equals a,t,g, or c

<400> 56

gaccctctca caccaggtta cccagcaaatt gaatatgctt ataggcgtgg aattgcagag 60
gctgttggtc tgccaagtat tctgtttcat ccaattggat actatgcatg cacagaagct 120
cctagwaaaa atgggtggct cagcaccacc agatagcagc tggagaggaa gtctcaaaagt 180
gccctacaat gttggacctg gctttactgg aaacttttct acacaaaaag tcaagatgca 240
catccactct accaatgaag tgacaagaat ttacaatgtg atagggtactc tcagaggagc 300
agtggaaacca gacagatatg tcattctggg aggtcaccgg gactcatggg tgtytggtgg 360
tattgaccct cagagtggag cagctgttgt tcatgaaatt gtgaggagct ttggaacact 420
gaaaaaggaa ggggtggagac ctagaagaac aattttgttt gcaagctggg atgcagaaga 480
atlttggtctt cttggttcta ctgagtgggc agaggrgrat tcaagactcc ttcaagagcg 540
tggcntgggc tttatattaa atgctgactc atctatagga aggaaactac actctgagga 600
gttggtattg acaccgcttg atgtacagct tgggtacacaa ccttaccaaa gagctg 656

<210> 57
<211> 794
<212> DNA
<213> Homo sapiens

<400> 57
gcggccgcag gcagcccacc ccgyccacgt cgccggagcc gccgcgcagc agccccaggc 60
agacccccgc gcccgcccc gcccgggaga agagcgccgg caagaggggc ccggaccgcg 120
gcagccccga gtaccggcag cggcgcgagc gcaacaacat cgccgtgcgc aagagccgcg 180
acaaggccaa gcggcgcaac caggagatgc agcagaagtt ggtggagctg tcggctgaga 240
acgagaagct gcaccagcgc gtggagcagc tcacgcggga cctggccggc ctccggcagt 300
tcttcaagca gctgccagc ccgcccttcc tgccggccgc cgggacagca gactgccggt 360
aacgcgcggc cggggcgagg gagactcagc aacgacccat acctcagacc cgacggcccc 420
gagcggagcg cgccctgccc tggcgcgagc agagccggcg ggtgcccgt gcagtttctt 480
gggacatagg agcgaaaga agctacagcc tggacttacc accactaaac tgcgagagaa 540
gctaaacgtg tttattttcc cttaaattat ttttgtaatg gtagcttttt ctacatctta 600
ctcctgttga tgcagctaag gtacatttgt aaaaagaaaa aaaaccagac ttttcagaca 660
aaccctttgt attgtagata agaggaaaag actgagcatg ctcaactttt tatattaatt 720
tttacagtat ttgtaagaat aaagcagcat ttgaaatcgc aaaaaaaaaa aaaaaaaaaa 780
aaaaaaaaaa aaaa 794

<210> 58
<211> 1155
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (135)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (432)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (443)
<223> n equals a,t,g, or c

<400> 58
aaaaagccag aagatgaaat tgctagttca aagttgttgg attgctagtc atgtcatgag 60
gatcagaagg ttgagatttt tgtagaagct tagaccagtg tgatagtagt gattggatca 120
agacgtttgc aaaanggact aggtcatag taacttcgcc tgataaacia cttgatgcag 180
atgtttcccc caagcccact attttcttcc ttcraattgct gaaacaaarc tccagaaggc 240
tggaacatac ctttgtcttc ttgagaaatt tttcccwgat rttattaaga tacattggsa 300
agaaaagaag agcaacacga ttctgggatc ccaggagggg gaacaccatg gaagactaac 360
gacacataca tgaaatttag ctggttaacg gtgccagaaa agtcactgga caaagaacac 420
agatgtatcg tncagacatg agnaataata aaaacggrgt tgatcaagaa attatctttc 480

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ctccaataaa gacagatgtc atcacaatgg atcccaaaga caattgttca aaagatgcaa 540
atgatacact actgctgcag ctacaaaaca cctctgcata ttacatgtac ctctcctgc 600
tcctcaagag tgtggtctat ttggccatca tcacctgctg tctgcttaga agaacggctt 660
tctgctgcaa tggagagaaa tcataacaga cggtaggcaca aggaggccat cttttcctca 720
tcggttattg tccctagaag cgtcttctga ggatctagtt gggctttctt tctggggttg 780
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agtgggcaca cagagaacct cactctgtaa taacaatgag gaatagccac ggcgatctcc 900
agcaccaatc tctccatgtt ttccacagct cctccagcca acccaaatag cgcctgctat 960
agtgtagaca tcctgcggct tctagccttg tccctctctt agtggtcttt aatcagataa 1020
ctgcctggaa gcctttcatt ttacacgccc tgaagcagtc ttctttgcta gttgaattat 1080
gtggtgtgtt tttccgtaat aagcaaaata aatttaaaaa aatgaaaarw aaamaaaaaa 1140
aaaaaaaaaa aaaaaa 1155
```

<210> 59

<211> 492

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (201)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (454)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (467)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (473)

<223> n equals a,t,g, or c

<400> 59

```
ggcacgagtg caggggtcaa cccttataaa tgcagtcaat gtgagaaatc cttcagtggg 60
aaattacgcc ttcttgtaca ccagagaatg cacacaagag agaaaccata tgaatgcagt 120
gagtgtggaa aagccttcat taggaattct caactcattg tacatcaaag aactcattca 180
ggagagaaac cctatgggtg ncaatgaatg tgggaaaacc ttctctcaaa aatcaattct 240
cagtrcacat cagagaacac atacaggaga gaagccttgt aagtgcactg aatgtgggaa 300
agccttttgt tggaagtcac agctcattat gcatcagaga actcatgtag rtgacaaaca 360
ttgataattt tacgaaactc tgaaaagtgg attcacaaga gatagaaaca atcatatata 420
aagagaaact ctgtaatggg aatcatcttg tccntcttcc agaaaantca tantgaatag 480
aaactttatg ga 492
```

<210> 60

<211> 1617

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1590)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1592)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1617)

<223> n equals a,t,g, or c

<400> 60

```
ggaggccctg cgagaggact gtgcggccca ggcacagcgg gcacagcggg cccaacagwt 60
gctgcagctg caggtgttcc agctgcacag gagaagcggc aattgcagga cgacttcgca 120
cagctgctgc aggagcgcga acagctggag cggcgtgctg ccaccttga gcgggacagc 180
gggagctcgg gccgaggctt gaggagacca agtgggaggt gtgccagaaa tcaggcgaga 240
tctccctgct gaagcagcag ctgaaagagt ctcaggcaga gctggtgcag aagggcagcg 300
agctggtggc tctgcgggtg gcgctgcggg aggcccgctg tacgctgcgg gtcagtgagg 360
gccgtgcgcg ggggtctacag gaggccgccc gagctcggga gctggagctg gaagcctgtt 420
cccaggagct gcagcgacac cgccagggaag ctgagcagct gcgggagaaa gctgggcagt 480
tgatgctga ggcggccgga ctccgggagc cccctgtgcc acctgccacc gctgacctat 540
tcctcctggc agagagtgat gaggccaaag tgcagcgggc agcagccggg gttgggggca 600
gcttgccggc ccaggtggag cgattgcggg tggagctgca gcgggagcgg cggcgggggtg 660
aggagcagcg ggacagcttt gagggggagc ggctggcctg gcaggcagag aaggagcagg 720
tgatccgcta ccagaagcag ctgcagcaca actacatcca gatgtaccg cgcaaccggc 780
agctagagca ggagctgcag cagctcagcc tggagctgga ggcccgggag ctgctgacc 840
tgggcttggc cgagcagccc cctgcactctg cctggaggag atcactgcta ctgagatcta 900
gggccctcag caaccagctc tgtagggagc tctgccagag gggcagcagc tgcagatcca 960
cttaggcccc aggggtccacg gatggcccca aaggctgagg gccccaaagc cacttgtctc 1020
ctaggatcca ggccctctggg cttctgccaa gaactcaggg tggccctatg acttgaggga 1080
gcaagatcag accgctcaaa ggtccccgtg ttcactgtta cccagaggct cttgttacta 1140
cccacttcat tccccaccgc tgccagtgcc actgccaacc ctgttcacag gcgcttccag 1200
cccactccag ccaggggagc agggagaag aaggggctcc ctctcttca cattcccccc 1260
gaccccaaag ccagagaaag ccagatggca ccagctgctc cgcatgtgcc tgcccacatt 1320
gggggacagg gccgggcctg ggctcgggtc ccaggtttga gctctgcagc ctctctcctg 1380
gagtgaaggg gctgaagtca gaccaaagga agaactcaga aatgtcttgt ttatttgtgt 1440
ttgtgaccaa gcagcctctc ccttcaccca ggtttatggc ctcgttttca cttgtatatt 1500
tttcacactg taaatttctt gtacaaaacc aaagaaaaaa ttaaaaaaaa ttttttgtt 1560
taaaaaaaaa aaaaaaaaaa aaaaaaaaaa cncngggggg ggcccgggtac ccaattn 1617
```

<210> 61

<211> 1653

<212> DNA

<213> Homo sapiens

<400> 61

```
aaatatgaga atttttaaagt aatatattga tyaaagatca ctgatgatat agatataata 60
tatcataaca gaaggaaagt aaatggactt gagcttaact tctcaccctg gaattattag 120
tggttgaaga ggggaatcat tagcattctg ggcgttttta tattaatgt tttgtgaata 180
tgccagaaga tctgccttca acttgtaatt aggcaagata gtaaygcttg atggtaactt 240
ctatgtttgt gtagaaataa taccagttag ttttggaag ccattcagat ccattcaaaa 300
attccataaa gtatgatgta tgctttggaa gagggatatg agtgatacaa ttgttatata 360
aatggaatag acaaaccatt tgaatgcatt tttctagggc aaacattttt tgagattttt 420
gagttaagaa gatttttctcg cttgagcaga agatgtgttt gttttgcatt tttcagctcc 480
aaggaaatag ccccatggc tttaaaaggc cctgaagtcc agatagtagt aggtagtgtt 540
ttgttattgt tttaatttga gagttgcagg aataatgggc agagctgtca tttgccggta 600
ckaccatctg cctacataga attattggac tgtaagctaa aacagactgt aaaagaccta 660
cttgctaaag cattgcttat tcagtgggat tcagtagata agatctattt cctgatatat 720
tgtgctcaag ttatttgcac atcttaagaa acttttaata tctaaaacca ttgttgtaag 780
atthaggtag aggaggtttc cttttgtgtg atgcataata atagaaaaca ctgatacagt 840
gtttactatg tgccaagcaa gcatatgata actaattctt aacaactcta tgaggcaggg 900
tcattttatta tctgttgtc atatgaggaa atctcgccag agagaagtta attaacctgc 960
ccaaggtcgt atagttagta aagtggatcat gcttggtatt taacctaggc agattacttc 1020
agagtcagcg tctgccttac tatcctgttt cctgagcagg aatttcccct tgtgtcaggc 1080
aacactaggt gttaggagtg gaggtgtgca gatgttgctt tacattctgt tttcctgatg 1140
tggtgtgctt cctaagagta caaacctgag catatgtcca ggcttgcaaa gtctcaggca 1200
aagctgggac taaggcttgt gtttcctgcc ttgggtagga ttttcttcta tgcattgttg 1260
gtgcttctca cttaacctaa tagtatgcct tgtctgtttt ccccccttcc cttttttgtt 1320
taaattgatt cacagaacac aaaaatttac taggtatgaa catttgaaaa aatggaatag 1380
agaaaaatggt acatcacatg taataaagat aaatatgttt ttgtgaaatg tctttttcaa 1440
tcataaatat gtgttgtgtg ctatataaaa ctatttctta ttgtggatat tgaagtttga 1500
agcctgttgt tcatctatag atgcactgga tgggattgga agtcttcaga tttcagtagg 1560
gttttccaca agcttatgaa gacattgttc tgtttaggct gtaaaactgtt tttatttctt 1620
gatgaaaaat gttcttctat ttatatgata cca 1653
```

<210> 62

<211> 440

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 62

```
gaattcggca gaggaataaa taatttatta tatggtaaag gtggcatttc aaatcaatgg 60
gaaaaggtag gtttattgac aaaggatttg aagcaacggg ttaagatttg gaaaataact 120
atctctgctc ccaaaccattc accatatgag actgtagacc taataaaaaat aaacataaga 180
ttatgagaat aaaatatcaa taaatatattt atactatctt gcagtgggat aggaattgtc 240
tcactcctgc tgggttgact ccccatgaac ccaggggctc ttcagttcca aagrggaaaa 300
aggggaacag atggcctcct ccccttcctc actccctcctg gaccaggat tgctccctga 360
aggttttcga gccaccctcc ttcccatctc tcctgggggg ccaaggangn ttaaacagca 420
gggcccttcc nggtgtgccc                                     440
```

<210> 63

<211> 1062

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (948)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (974)

<223> n equals a,t,g, or c

<400> 63

```
aattcggcac gagggaaacct tgaaccagcc rctgaccaa ttggatagat cttctgaaga 60
gcctttggga gttctggtaa atcccaacat gtaccagtcc cctccccagt ggggtgacca 120
cacaggtagc gcctcacaga agaaggcttt ccgttcttca ggatttggac tagagttcaa 180
ctcatttcag caccagttgc gaatccagga tcaagaattt caggaaggct ttgatggtgg 240
ctggtgcctc tctgtacatc agccctgggs ttctctgctt gtcagaggga ttaaaagggt 300
ggagggcaga tcctggtaca cccccacag aggacgactt tggatagcag ccacagctaa 360
aaaaccctcc cctcaagaag tctcagaact ccaggctaca tatcgtcttc ttcgtgggaa 420
agatgtggaa tttcctaatt actatccgtc agttgtcttc tgggctgtgt ggacctaat 480
gactgcttgt cccagaagca atttaaggag cagtttccag acatcagtca agaattctgat 540
tctccatttg ttttcatctg caaaaatcct caggaaatgg ttgtgaagtt tcctattaaa 600
ggaaatccaa aaatctggaa attggattcc aagatccatc aaggagcaaa gaaggggtta 660
atgaagcaga ataaagctgt ctgaccagag agaaaaggaa ctatacagca tagtgagatt 720
ttgtgtacta aaattgctat ctactggtcc tttggaattg aagtagtaga aacctaaagg 780
cttggcgtca ggcttgaata tctcagaact taaactctta ccaaaatctg tatatttttc 840
ttaaggagtg ggattcctac tttatgtaat ggggtcgaaa tctttgaaca cattatttat 900
aaaaacctgt ttaaaagggtc gacggtatcg ataagcttgg atatcgantt cggcacgagc 960
ccacctctac ctctgggggg accggcctgg acgtggtgg ccccgaggacc cagcagagct 1020
gggggaaggg tcagccccc aaagaaatgg ggtgcatgc tg                                     1062
```

<210> 64

<211> 422
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (252)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (349)
<223> n equals a,t,g, or c

<400> 64
ggcagagggg agaggaaggg aggggagggg agcccccttct tcctggtaga tacaaagctg 60
ggctctggat acccttgaag cagtgcacag cctgtacaac agtccccagc agccctgtct 120
atccccccagc atctccctgc tagctgctgt tccctctcct cccgctgget gggcctgctg 180
ccaagctgtg gtgactcagc tgagctggca cattgacccc agcttattgt ttaaaaacca 240
gcccgaacttg gnaatttatg gtttcctatc cccttccaca catttttctg gccacaaggc 300
aagaaactta tctctggcat cttcagattt cttstatttw attttgggnc ttcccttgcc 360
tggcaatatg tttcatagag tgggtaagtg agacctgaca ggtgttttca aggataattt 420
ca 422

<210> 65
<211> 709
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (674)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (684)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (692)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (697)
<223> n equals a,t,g, or c

<400> 65
aattcggcag agcgcttctc cattctctgt gggttgtgtt gttttcttca tgaattccga 60

```

agtttactct tggatgatct agttgaagag ctagtgttta ctgatcacac tgtcttctct 120
ccttgaaatt ggtgcatatt agctgcttct agtcagccct ctgcccaga atccccaaaa 180
agaaaattgt tagttcaggg attgtagctt ttttttgggt ttaacatgag atatgtgatt 240
ataataaaact tcaagtattc aggaccattt tatggataaa aggagaatct aactttttaa 300
agttgggaaa atgattttaat attggaaaact caagagttac aaattcttac agttatttca 360
aaactaaagg tttcttttaga gctccaaaatt tagagctata aatcctatat ccgtaatcaa 420
atccagtact gataacaatg aacaattgct gaagagtaat attctctctc tctttaccaa 480
tgtaagcctt agcattggta ctttcttgwa wtatcttttt gcatgccatt atgatacaga 540
aaaacaaaaa gctaccacaga aagggcagcc acattctaaa tgataggctt ttacctcctt 600
gagggggctg ctagggtacct acctggatta ggaattcatt tggtaaaca cagggggcct 660
tttaaatcta aatnaccatt tccnaataat tngtttnccg tttattccg 709

```

<210> 66

<211> 1302

<212> DNA

<213> Homo sapiens

<400> 66

```

gctcgacaag aagagaaaaga aggacatgct gaatagcaaa accaaaactc agtattttcca 60
ccaggaaaaa tggatctatg ttcacaaagg aagtactama gagcgccatg gatattgcac 120
cctggggraa gctttcaaca gactggactt ctcaactgcm attctggatt ccagaagatt 180
taactacgtg gtccggctgt tggagctgat agcaaagtca cagctcacat ccctgagtgg 240
catcgcccaa aagaacttca tgaatatattt ggaaaaagtg gtactgaaag tccttgaaga 300
ccagcaaac attagactaa taagggaact actccagacc ctctacacat ctttatgtac 360
actggtccaa agagtcggca agtctgtgct ggtcgggaac attaacatgt ggggtgtatcg 420
gatggagacg attctccact ggcagcagca gctgaacaac attcagatca ccaggcctgc 480
cttcaaaggc ctcaccttca ctgacctgcc tttgtgccta caactgaaca tcatgcagag 540
gctgagcgac gggcgggacc tggtcagcct gggccagctg ccccgacct gcacgtgctc 600
agcgaagacc ggctgctgtg gaagaaactc tgccagtacc acttctccga gcggcagatc 660
cgcaaacgat taattctgtc agacaaaggg cagctggatt ggaagaagat gtatttcaa 720
cttgtccgat gttacccaag gaaagagcag tatggagata cccttcagct ctgcaaacac 780
tgtcacatcc tttcctggaa gggcactgac catccgtgca ctgccaataa cccagagagc 840
tgctccggtt cactttcacc ccaggacttt atcaacttgt tcaagttctg aatcccagca 900
catgacaaca cttcagaagg gtccccctgc tgactggaga gctgggaata tggcatttgg 960
acacttcatt tgtaaatagt gtacatttta aacattggct cgaaacttca gagataagtc 1020
atggagagga cattggaggg gagaaatgca gttgctgact ggggaatttaa gaatgtgaac 1080
ttctcactag aattggtatg gaaaagcaaa atactgtaaa taaacttttt ttctaacaat 1140
ttgccagcaa gactataagg gcaataattc tatttcagcg gtgaaaatgg agtcctctta 1200
atggtcacag aaactctctt atagttccct aggaagaaaa aggcaaaact caaatacaaa 1260
ataggacgct ttgtttacaa tgtgaaaatt tgtttagaaa ag 1302

```

<210> 67

<211> 1046

<212> DNA

<213> Homo sapiens

<400> 67

```

aattcggcac gagcttctgt tgggtgttatt ttcaattcta tttccagtgc cacaatagag 60
tgatatttaa gcaactccta caggcgaagg ccctgcagtt cctccagatt gacagttgca 120
gactgggcag tgtcaatgag aacctctcag tattgtgat ggccaaaaag tttgaaattc 180
ctgtttgccc ccatgctggt ggagttggcc tctgtgaact ggtgcagcac ctgattatat 240

```

```

ttgactacat atcagtttct gcaagccttg aaaatagggt gtgtgagtat gttgaccacc 300
tgcatagaca tttcaagtat cccgtgatga tccagcgggc ttcctacatg cctcccaagg 360
atccccgcta ctcaacagaa atgaaggagg aatctgtaaa gaaacaccag tatccagatg 420
gtgaagtttg gaagaaactc cttcctgctc aagaaaatta agtgctcagc cccaacaact 480
tttttctttc tgaagtgaat gggcttaaaa tttcttgtaa atagttttac aaaaatggat 540
ttaaaaaatc ctaccgatca agatgagttc agctagaagt cataccaccc tcagggaatca 600
gctaagtaat tattacttga ttcttttagc aaatcaatgc acgttatcct acttaatcct 660
taaataagtt tagatttaac taacccaaag tccaggagga tgttcttaca aaaatagcta 720
tatcaagggc tggcacctag acattaaact gtaatttgaa aataagcaac atgttgcata 780
acttggtgga ataattcctt gttctgttta acacttgtca taaattagca gaataaaaaat 840
agtcgtgcaa caccgggggt atctggtatg caacgaaggg raaaatattt cactgattaa 900
ccccgaagtg gttttgcata ttttccttgc ttaatctaag catattatta gagaagtcac 960
accatgctga agctaattgag ggcaaaatgg tagtccatag attattttta aataaccctt 1020
taaggttata aaagtttaaa aaaaaa 1046

```

<210> 68

<211> 501

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (311)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

<400> 68

```

caagagaaga aattatgaaa gggcgtgaat accaagaggc aggttattgg gggccatctc 60
agaggctgcc caacacaggc tactcttttg ccccgatga ttcatgttcc ttccaaatgc 120
aaaatgcccc gtcccaagat ctccaaaagt cttatcccat tataggatta gctcagagtt 180
cagaacctta tcatctaaag ttccagggtg aggttaaggct tttgggtgta gttattttat 240
tacagctcct agcacacttc tagtggtata ctaatgcctc ttctgtatag ttacttgga 300
aataaatgat ntaggtactt tgatccatat ggagttctgt gtaggaagat caacctagat 360
ctgatgttag ctggtaaaca ctgtagtggt aaaaaggcac tgtnttatga tagctctttt 420
tgacagtgcac tgggattatg gggcaaatgg taaatggcat gcaattgaga tcagtattag 480
gttattaatt gaactggaat c 501

```

<210> 69

<211> 581

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<400> 69

```
aattcggcac gagggaaaga aggccatgta ggggcttgct ttagtcatcc actgctaact 60
cattaactat taattcaagc aatatgtatt atagaaccgt tttgtgtagc attggaatat 120
tgtccatttt gtaagtcatt gtgaatgtnc ttaattatca gcttgaaggc atttttgtat 180
taaaagttga cattgaagaa cctaagtggg tgatgggatt tggggccagt agtgaaagta 240
tgtttcctct aaaatatttc cctaaacagt ggtatacatg gttattttat tatgagattt 300
gtatatgttc tgtgtttctc tgtgaacaat gtttcagtct ctctgtcacc atatgtaagg 360
ggaagtccac aaatatagac tacattgcac aaaactaaaa ttgttaatta caagaaaata 420
taggtgctta ccttttgaag gtttattaat acatatgggt gtcacaatac gtatatatga 480
taaagtgtgt acatatacag atgtttatgg tgtataaatt tttctatacc caaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggccccccc a 581
```

<210> 70

<211> 1076

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 70

```
tccaaacaga gggagcagct atttaagggg agcaggagtg cagaacaaac ragacggcct 60
ggggatacaa ctctggagtc ctctgagaga gccaccaagg aggagcaggg gagcgacggc 120
cggggcagaa gttgagacca cccagcagag gagctaggcc agtccatctg catttgtcac 180
ccaagaactc ttaccatgaa gaccctccta ctgttgccag tgatcatgat ctttggccta 240
ctgcaggccc atgggaattt ggtgaatttc cacagaatga tcaagttgac gacaggaaaag 300
gaagccgcac tcagttatgg cttctacggc tgccactgtg gcgtgggtgg cagaggatcc 360
cccaaggatg caacggatcg ctgctgtgtc actcatgact gttgctacaa acgtctggag 420
aaacgtggat gtggcaccac atttctgagc tacaagttta gcaactcggg gagcagaatc 480
acctgtgcaa aacaggactc ctgcagaagt caactgtgtg agtgtgataa ggctgctgcc 540
acctgttttg ctagaaacaa gacgacctac aataaaaagt accagtacta ttccaataaa 600
cactgcagag ggagcaccac tcgttgctga gtcccctctt ccctggaaac cttccaccca 660
gtgctgaatt tccctctctc ataccctccc tccctaccct aaccaagttc cttggccatg 720
cagaaagcat cctcaccaca tcctagaggc caggcaggag cccttctata cccaccaga 780
atgagacatc cagcagattt ccagccttct actgctctcc tccacctcaa ctccgtgctt 840
aaccaaagaa gctgtactcc ggggggtctc ttctgaataa agcaattagc aaatcawrwa 900
aaaaaaaaaa naaaaaagaa aaaaagtttt ggcctaaatg agtcgtatta cagttgacgc 960
ggccggcgaa ttttagtagat ggtgtaattc gaccgcagaa attccggaac cggaactctg 1020
aggggtgaca agtttcccca agagcggcgg attaaggcct gggcggacaa agggcg 1076
```

<210> 71

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (347)

<223> n equals a,t,g, or c

<400> 71

```
gcccacgcgt ccgaggaggg ccgcstttcc ggtctgggtc ccsgagagga ctgccttgct 60
cacctgtccc ctcggcgcgg ccccgaggag ctcccgagag gcccmmggga tcgctggccc 120
tccgaactcc acagcaatga gcaagttggg caagttcttt aaagggggcg gctcttctaa 180
gagccgagcc gctcccagtc cccaggaggg cctgggtccga cttcggggaga ctgaggagat 240
gctgggcaag aaacaagagt acctggaaaa tcgaatccag agagaaatcg ccctggccaa 300
gaagcamggc acgcagarta agcgagggat cwgmacwaaa tagatgnttt gatgcaagag 360
atcacagagc aacagg                                     376
```

<210> 72

<211> 374

<212> DNA

<213> Homo sapiens

<400> 72

```
aattcgacsa gccagggcac cctgcccattg tatcccammc agagggagca gaaccagcgg 60
tgtaactact gtgcttgaca cccagggcag gtcttttttt aactcaccga tcttccatgc 120
aacaaaattg ttttctgtga aaagcaggaa atgaataaca acagcgtagg tactccactt 180
caaatttccc aagaaattca gaagaattgt gaacaagttg ctgggtttcac aatactgcaa 240
gacactgcaa gttattccaa gttcctacag gacaacgatg cacaattatt tacttactta 300
tgttttaaata tacctatcag tttgactttc atcctttggt gacattctaa taatttatgt 360
aaataattat tcag                                     374
```

<210> 73

<211> 419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (221)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (411)

<223> n equals a,t,g, or c

<400> 73

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aactactgcc agaaccctaaa tattgccagt sggcctcttc tgctgctggt gctagctgtc 120
ttcttctggg ggaaatgggt tgggttctaa atatgaatta acacaggggt gtcttcgatg 180
aattcagcac aaaatgttct cagcaattga acactcggag ngaagtgtta ggcatttagt 240
gcagactcat agaatagcag gacagggagg gatttggatc tgggcaagca ggagatgggt 300
atgaacatct gtcttttgag acctgccgag gtggcaatga aggtagaggc ccctgtgttg 360
```

aggctctttat tcaagaggct gtgggtccctt tgggacttaa catagcatcc nttagacag 419

<210> 74

<211> 286

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (154)

<223> n equals a,t,g, or c

<400> 74

gcaggcgact tgcgagctgg gagcacttta aaacgctttg gattcccccg gcctgggtgg 60
ggagagcgag ctgggtgccc cctagattcc ccgcccccg acctcatgag ccgaccctcg 120
gctccatgga gccnaggcaat tatgccacct tggnatggag ccaaggatat cgaaggcttg 180
ctgggagcgg gaggggggcg gaatctgggc gcccaactccc ctctgaccag ccaccacgcg 240
gcgcctacgc tgatgcctgc tgtcaactat gcccccttgg atctgc 286

<210> 75

<211> 633

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (89)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (531)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (570)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (623)

<223> n equals a,t,g, or c

<400> 75

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ggcttttcgcg aatcccagag caatctcgna ggcggtatth gacctgtcca aagacgactt 120
gatacctcta taatgtaaca gaaaagggtca gaaaatatta agcaagtaga agtgtggagc 180
atattaagca agatgaacat ctcggaagc agctgtggaa gccctaactc tgcagatata 240
tctagtgact ttaaggacct ttggacaaaa ctaaaagaat gtcagtatag agaagtataa 300
ggttttacaag taaaagtaac caagctaaaa caggaacgaa tcttagatgc acaaagacta 360
gaagaattct tcacaaaaaa tcaacagctg agggaacagc agaaagtcct tcatgaaacc 420
attaaagttt tagaagatcg gttaagagca ggcttatgtg atcgctgtgc agtaactgaa 480
gaacatatgc ggaaaaaaca gcaagagttt gaaaatattc cggcagcaga ntcttaaact 540
tattaccgaa cttatgaatg gaaaggatan tctaccggga ggaattaaaa gctttctgga 600
caactccgcc ggaattgnga tgntcaccgc ttc 633
```

<210> 76

<211> 256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (134)

<223> n equals a,t,g, or c

<400> 76

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aaacaattag ccagggcata gtggcatatg cccattgtcc catctactct ggaggctgag 120
gcgggaggtt cgangttcac agaaccacca taaccatcc agctagccag gtagaaggcc 180
tccaggtccg acgttgcatc ccccagggtc tgatgtgtgc tgcaatcttc atccctaggc 240
agwagagcta aaaatg 256
```

<210> 77

<211> 694

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (668)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (673)

<223> n equals a,t,g, or c

<400> 77

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ttgctggacc cgcagccctg caggacagag actggcagcg caccgtcatc gccatgaatg 120
ggatcgaagt aaagctctcg gtcaagttca acagcagggg gttcagcttg aagaggatgc 180
cgtcccgaaa acagacaggg gtcttcggag tcaagattgc tgtggtcacc aagagagaga 240
gggtccaagg gccctacatc gtgcgccagt gcgtggagga gatcgagcgc cgaggcatgg 300
aggaggtggg catctaccgc gtgtccggtg tggccacgga catccaggca ctgaaggcag 360
ycttcgacgt caataacaag gacgtgtcgg tgatgatgag cgagatggac gtgaacgcca 420
tcgcaggcac gctgaagctg tacttccgtg agctgcccga gcccctcttc actgacgagt 480
tctaccccaa cttegcagag ggcacgcctc tttcagaccc ggttgcaaag gagagctgca 540
tgctcaacct gctgctgtcc cttgccggag caaaccttgc ttcamctttc cttttccttt 600
ttggraccam ctgaaaaagg gttggcagag aaggagggca gttcattaag ttccttgcaa 660
aaaacttngc canggttttt ttggcccaa ggtt 694
```

<210> 78

<211> 2562

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (75)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2556)

<223> n equals a,t,g, or c

<400> 78

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ggcacgagtg tagacgaagg ctccatatca ccccggaactc tttcagccat taagagagct 60
cttgacgatg acgangatgt aaaagtgtgt gctggggatg atgtgcagac gggagggcca 120
ggagcagaag aaatgcgtat aaacagctcc accgagaaca gtgatgaagg acttaaagtg 180
agagatggaa aaggaatacc gtttactgca acacttgctg catctagtgt gaactctgca 240
gaggagcacg tagccagcac taatgagggg agagagccca cagactcagt tccaaaagaa 300
caaatgtcac ttgttcacgt ggggactgaa gcctttccga taagtgatga gtctatgatt 360
aaggacagaa aagatcggct gcctctggag agtgcagtg ttagacatag tgacgcacct 420
gggctcccga atggaaggga actgacaccg gcatctycaa cttgtacaaa ttctgtgtca 480
aagaatgaaa cacatgctga agtgcttgag cagcagaacg aactttgccc atatgagagt 540
aaattcgatt cttctcttct ttcaagtgat gatgaaaca aatgtaaacc gaattctgct 600
tctgaagtca ttggccctgt cagtttgcaa gaaacaagta gcatagtaag tgtcccttca 660
gaggcagtag ataatgtgga aaatgtggtg tcatttaatg cttaaagagca tgagaatttt 720
ctggaaacca tccaagaaca gcagaccact gaatctgcag gccaggattt aatttccatt 780
ccaaaggccg tggaaccaat ggaaattgac tcggaagaaa gtgaatctga tggaagtttc 840
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gctgagtcgg agagcctcct gagggacaac tctgagaggg acgacgtgga tggtagacca 1020
caggaagctg agaaagatgc ggaagattcg ctccatgaat ggcaagatat taatttggag 1080
gagttggaaa ctctggagag caacctctta gcacagcaga attcactgaa agctcaaaaa 1140
```



```

cagcagcaag aacggatcgc tgctactgtc accggacaga tgttcctgga aagccaggaa 1200
ctcctgcgcc tggttcggcat tccctacatc caggctccca tggaagcaga ggcgcagtgc 1260
gcatcctgga cctgactgat cagacttccg gaaccatcac tgatgacagt gatattctggc 1320
tgtttgagc gcggcatgtc tatagaaact tttttaataa aaacaagttt gtagaatatt 1380
atcaatatgt ggactttcac aatcaattgg gattggaccg gaataagtta ataaatttgg 1440
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gagaacagct gcgaaagagc caaaaaccag tgcttcagat tcgcagaact cagtgaagga 2280
agctcccgtg aagaatggag gtgcgaccac cagcagctct agtgatagt atgacgatgg 2340
agggaaagag aagatggtcc tcgtgaccgc cagatctgtg tttgggaaga aaagaaggaa 2400
actaagacgt gcgaggggaa gaaaaaggaa aacctaatta aaaaatatgt atcctctata 2460
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rgcacggtaa aaaaaaaaaa aaaaaaaaaa aaaaanaaac aa 2562

```

<210> 79

<211> 1610

<212> DNA

<213> Homo sapiens

<400> 79

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aattcggcac agggaaacat tctggtaatt tgtagagatc tgttggtatc tctgcttcac 60
aaactgga aaatcatttg taagtcttgc taattacttt tcttgagaa gaaaaaaat 120
gctacagttg caaacaatg tatagttttc aaaaagaagc aacttttttg ctccccagtt 180
tattcttagt ttccagccca cgccttgcca tagsratagg catagtgat gcctcaattc 240
tttctctctt gcatccgtac cttttgctgt gtgactttgc agctcctctc attaaagagg 300
cagagcccc tctcccaccc ataggagcag gttttgagag taacagaatg aagtgaat 360
gacactgtgc cagttctaag accagccctc aaagggtcat gtgtttctgc ttgctttcac 420
tgtattgaa atgttgctgt gagaaagaca tctctgaaac agctgaatgg tcctaagaaa 480
aggatgagag atgcaggag cagagctccc aactgaggcc agcctagatc acctaagagc 540
caggccccc gtttactctc atgtgtaagc aataaatgct taccacagca ataccacaa 600
ggtttggtg ttggtttatat acagcattaa tgtggcaata ggtgcaatac accctgttaa 660
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acaacgctgt ttctccaga atctcacaga tgacttacta aatccaacac aaatacacct 780
cagactttct gtctagctcc caaccagtta aaagcaattc taaatatatt tttcttagt 840
cgtagtgcaa aagtatatcc tctccctttc tctatagttt tctctcattt tgtcttcaga 900
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ttatatTTTT atattgttta tctgacgttc aagctractg ggcattcctgt atttttctta 1140
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```

gcagaatctg ccatatgagt aatagaagtg agcaggccca ggactcccta agtcaagaaa 1260
ccaagaggcg tcattacgga aaagagtaac tcaccctgtg tgctccttgg tagttctccc 1320
tcagcgatgc ccccatgtta tgaatgggga aaagtctact gaagggttca tagtgaagaa 1380
actttttgga tgatttctgk tgggtgggtt tggatacctt caagggatca gaaaataata 1440
tacttaggaa attttggtta tgtcatcatt actctctaca ttattattat gacgggttaca 1500
attgttaaat ctaggtgggt ggtatgtggg ttatattgta catgattttt aacttgtctg 1560
catgtttgaa attataataa agtcaataaa taaattattg agacactctt 1610

<210> 80

<211> 1048

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (131)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (997)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1021)

<223> n equals a,t,g, or c

<400> 80

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aatgctaagt naggttgga ggacgcaaca actccatctt ctgtgacttc tcctacagaa 180
ggccaggaa gtgtgcactc ggatacctct aactaatctc tggccacact tttccctgag 240
ctacatgcct tgataagtgc attcagagca ataggaggaa aaggaaagcg tttttgtagc 300
ccaccatcta cagctttact gtaaaacctt gtcttattcg agaacttggg aaatctgttt 360
tttaaggaat cataatcatt tgtatttata cttaaaaaca cacaatgtta aaaaaataa 420
agcactttat ccaattaggc caagatttaa cattgttgac agtcctgtag ctattttatc 480
ataatttatt atcaatatatt tacattaatg gtttcacagt tgccaattac ttggccttaa 540
gggtaaaaag tacaatatat actaaacctc aaccgttaaa gcagatgcaa aaattcacct 600
cacctaaatt gaacttcttg catatttcca ttactgactt ggattgtctt tctttcatat 660
cactaatgga gttggaataa agagctgttt gcctatccct gttaatgatg gttgtgttta 720
agaatcttcc tcgtcacgtt tgtgttcaga tctcttatgt tataattaga tcagagactg 780
gtagcatcgt ttctctctct gaaagcacca gtgccagag tctgctcggg aataaaatta 840
tggatccaga ttgttctgag agacgaagat acttgctgct gatagagggtg aaaacgagat 900
tgatccgtct ggggttttac ggtgtgcact ggggtgctgca cagacttgct aaggtttgcy 960
acgtccyckg ggcactgcma aaggcccgcc cccggngtgt tgtaaaaatg tagccaaaga 1020
ntatttaaac atccccacaa ccaaacac 1048

<210> 81

<211> 1136

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1124)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1131)

<223> n equals a,t,g, or c

<400> 81

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gcactgatat ttgtcattga ctcacaggat gattacatgg aagccctggc caggctccac 180
ctcacggtga ccagggccta caaagtgaat actgacatca acttcgagggt gtttattcat 240
aaagtggatg gtctgtcaga tgaccacaaa attgaaaccc aaagagatat tcaccagagg 300
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caactcccaa ctctggagaa tttgctgaac atctttatct caaattctgg aattgaaaag 480
gcatttctat ttgatgtggt cagtaaaatt tatattgcaa ctgatatgac tccgggtggat 540
atgcaaacct atgagctctg ctgtgatatg atagatgtgg ttattgacat ctcttgatt 600
tatggtctca aagaagatgg agcaggaacc ccctatgaca aggaatccac agccatcata 660
aagcttaata atacaaccgt gctttattta aaagaggtga caaagttcct ggctctcggt 720
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ttccggaagg ccattcatga agtttttgag gtgagaatga aagtagtaa atctcgaaaag 840
gttcagaatc ggctgcagaa gaaaaagaga gccacccta atgggacccc tagagtgcgtg 900
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taaaaaaaaa aaattcctgc aaccctcttg atcttctctt ttataaataa agtaagcact 1080
ttgaagcaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaangggggg ncccc 1136
```

<210> 82

<211> 297

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (28)

<223> n equals a,t,g, or c

<400> 82

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gggagagacc caccgacct gtggggctgg tccctacatc tggcgctctg acgtggggct 120
ctccctcgct gtgtgaagt gcacctgag tgcgggatca gcggaggagt tcaacgagag 180
attcctgagg attgcagtct ataaacttgg tgcaggcggc tgaccccgca gctyaacaag 240
atcaagaggc tgataatcaa gccctcagc ccgaaactca ggctgctcag ggaaaag 297
```

<210> 83

<211> 2150

<212> DNA

<213> Homo sapiens

<400> 83

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agctctttcc ccgtcagcat ccagccgtg ctcacgcaga cggactggac tgagccctgg 180
ctcatggggc tggccacctt ccacgcgtc tgctgtcttc ctcacctgct tgctctcccg 240
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cattgtgggt atgtgggtat ggaagacttt gaatgtgatg actgacctga agaatgcaca 480
agagagaaga aaggaaaaga aaaggagaag gaaagaagac tgaggggcag cagctgcttg 540
gagtttgct ccttcccgtc caccagtg cagctcccag gctgcagtgt gcgtggcgtg 600
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ccatgccctc ctccctcgtg tgtgttttct agtgcatgcc acagttcgca gtagaggggtg 960
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cagccgcac acagacaatg acttgacatg aaatgtcagc tgtgctgggg gcagagagac 1140
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tggtttcccc tatgttgta tcataataga gagggagttc tcacaagatc tgctggtttt 1980
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```

<210> 84

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (66)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<400> 84

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tcaagaacca cttcctgagt cttagtgtat gtgtgtacaa aagaatgaaa gaagtctcta 180
gagctaaagg aaggagatyc gggctgggct gagaagcatc ttccaggatc acggscttcc 240
cgcgggacac accaagccca ttccggatct tgctcttcct gaccatggyt ggcaggytgt 300
ggaggaggas cggagagcag aagaaaggag tattcatcag gttccttatt gtgctgccac 360
tagatgccag gcatgtgctt aggcttgggg ggctgcaagg agaggaagac agcggccctg 420
ccctytgyta gcaggcagaa ccgagttytg gccacamtgt gaaggaaagg cagaagcctg 480
cgktggcary tggtttaagc tcagngggca gggaaaggga agaggagaat ggttttcacg 540
gagcagaagg ttgtgctcaa ggtggacctt ggagaataaa ggggagagct ccagggaaca 600
g 601
```

<210> 85

<211> 534

<212> DNA

<213> Homo sapiens

<400> 85

```
cgcgctgacg ttcctcctaa ctctgccag aaacrgctct cctcaacatg agagctgcac 60
ccctcctcct ggccagggca gcaagcctta gccttggtct cttgtttctg ctttttttct 120
ggctagaccg aagtgtacta gccaaaggag tgaagtttgt gactttggtg ttctggcatg 180
gagaccgaag tcccattgac acctttccca ctgaccccat aaaggaatcc tcatggccac 240
aaggatttgg ccaactcacc cagctgggca tggagcagca ttatgaactt ggagagtata 300
taagaaagag atatagaaaa ttcttgaatg agtccataaa acatgaacag gtttatattc 360
gaagcacaga cgttgaccgg actttgatga gtgctatgac aaacctggca gccctgtttc 420
ccccagaagg tgtcagcatc tggaatccta tcctactctg gcagcccatc ccggtgcaca 480
cagttcctct ttctgaagat cagttgctat acctgacctt tcaggaaactg ccct 534
```

<210> 86

<211> 1037

<212> DNA

<213> Homo sapiens

<400> 86

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tgctgactca tctatagaag gaaactacac tctgagagtt gattgtacac cgctgatgta 60
cagcttggtg cacaacctaa caaaagagct gaaaagccct gatgaaggct ttgaaggcaa 120
atctctttat gaaagttgga ctaaaaaaag tccttcccca gaggttcagt gcatgcccag 180
gataagcaaa ttgggatctg gaaatgattt tgaggtgttc ttccaacgac ttggaattgc 240
ttcaggcaga gcacggtata ctwaaaattg gggaaacaaa caaattcagc ggctatccac 300
tgtatcacag tgtctatgaa acatatgagt tgggtggaaaa gttttatgat ccaatgttta 360
aatatcacct cactgtggcc caggttcgag gagggatggt gtttgagcta gccaatcca 420
tagtgctccc ttttgattgt cgagattatg ctgtagtttt aagaaagtat gctgacaaaa 480
tctacagtat ttctatgaaa catccacagg aaatgaagac atacagtgtg tcatattgatt 540
cacttttttc tgcagtaaag aattttacag aaattgcttc caagttcagt gagagactcc 600
```

```

aggactttga caaaagcaac ccaatagtat taagaatgat gaatgatcaa ctcatgtttc 660
tggaagagc atttattgat ccattagggt taccagacag gcctttttat aggcattgtca 720
tctatgctcc aagcagccac aacaagtatg caggggagtc attcccagga atttatgatg 780
ctctgtttga tattgaaagc aaagtggacc ctccaaggc ctggggagaa gtgaagagac 840
agatttatgt tgcagccttc acagtgcagg cagctgcaga gactttgagt gaagtagcct 900
aagaggattc tttagagaat ccgtattgaa tttgtgtggt atgtcactca gaaagaatcg 960
taatgggtat attgataaat tttaaaattg gtatatattga aataaagttg aatattatat 1020
atagttaaaa aaaaaaaa                                1037

```

<210> 87

<211> 597

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<400> 87

```

gcggccctac tactactaaa ttcgcggcnc gtcgacaagg agtcctgctt atcacaatga 60
atgttctcct gggcagcgtt gtgatctttg ccaccttcgt gactttatgc aatgcatcat 120
gctatttcat acctaattgag ggagttccag gagattcaac caggaaatgc atggatctca 180
aaggaaacaa acaccaata aactcggagt ggcagactga caactgtgag acatgcactt 240
gctacgaaac agaaatttca tgttgacccc ttgtttctac acctgtgggt tatgacaaag 300
acaactgcc aagaatcttc aagaaggagg actgcaagta tatcgtggtg gagaagaagg 360
acccaaaaaa gacctgttct gtcagtgaat ggataatcta atgtgcttct agtaggcaca 420
gggctcccag gccaggcctc attctcctct ggcctcta atgtcaatgat tgtgtagcca 480
tgctatcag taaaaagatt tttgagcaaa maaaaaaaaa aaaaaaaaaa aaaaaaaaaa 540
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggnggcc gctctag 597

```

<210> 88

<211> 474

<212> DNA

<213> Homo sapiens

<400> 88

```

aatccttaac ctctgcatt ttagaaatac tccagagctt gtcttattct taccaaaatt 60
cctgtaggcc tttgactcct gactcaccct gtctgcagtg tccccagcc tgcaggggtg 120
ggtgwgtcac agcaaccctc agccaccagc tgttttccat ctgccggcct tcctggggga 180
gagtcacctc cagctgtagc ccctgtctat gggaaaagtc tcatgtcctt ttcattctct 240

```

```
cccactgcac actgtctctc accctagact ataattcaag tgaatttgac ctccatttat 300
tggaacaagcc aggsactgtg ctaggrataa tgwaaccat tagacaaatc tgaaagggag 360
ggatcactag actaaggggt agaaatgtgg agatgggagt aactttctgc atgtctttgc 420
aggagggtggc atgtgagaaa gcttttttga agagggtggc cctggagctg tgga 474
```

<210> 89

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 89

```
agactttgaa atcagaggaa ttccagaaga ggctgcaccc ttataaggat tttatagcta 60
ccttgggaaa actttcagga ttacatggcc aggacctttt tggaatttgg agtaaagtct 120
acgacccttt atattgtgag agtggtcaca atttcacttt accctcctgg gccactgagg 180
acaccatgac taagtgtgag gaattgtcag aattgtccct cctgtccctc tatggaattc 240
acaagcagaa agagaaatct aggtccaag ggggtgtcct ggtcaatgaa atcctcaatc 300
acatgaagag agcaactcag ataccaagct acaaaaaact tatcatgtat tctgcgcagt 360
acactactgt gagtggccta cagatggcgc tagatgttta caacggactc cttcctccct 420
atgcttcttg ccacttgacg gaattgtact ttgagaaggg ggagtacttt gtggagatgt 480
actaycggaa tgagacgcag cacgagccgt atcccctcat gctacctggc tgcagcccca 540
gctgtcctct ggagagggtt gctgagctgg ttggccctgt gatccctcaa gactgggtcca 600
cggagtgtat gaccacaaac agccatcaag gtactgagga cagtacagat tagtgtgcac 660
agagatctct gtagaargag tagctgccct ttctcagggc agatgatgct ttgagaacat 720
actttggcca ttacccccag ctttgaggaa aatgggcttt ggatgattat tttatgtttt 780
agggaccccc aacctcaggc aattcctacc tcttcacctg accctgcccc cacttgccat 840
aaaacttagc taagttttgt tttgtttttc agcgttaatg taaaggggca gcagtgccaa 900
aatataatca gagataaagc ttaggtcaaa gttcatagag ttcccatgaa ctatatgact 960
ggccacacag gatcttttgt atttaaggat tctgagattt tgcttgagca ggattagata 1020
aggctgttct ttaaattgtct gaaatggaac agatttcaaa aaaaaacccc acaatctagg 1080
gtgggaacaa ggaaggaaaag atgtgaatag gctgatgggc aaaaaaccaa tttaccatc 1140
agttccagcc ttctctcaag gagaggcaaa gaaaggagat acagtggaga catctggaaa 1200
gttttctcca ctggaaaact gctactatct gtttttatat ttctgttaaa atatatgagg 1260
ctacagaact aaaaattaaa acctctttgt gtcccttggt cctggaacat ttatgttcct 1320
tttaaagaaa caaaaatcaa actttacaga aagatttgat gtatgtaata catatagcag 1380
ctcttgaagt atatatatca tagcaaataa gtcactctgat gagaacaagc tatttgggca 1440
caacacatca ggaaagagag cmccacgtga wggagttyt ctagaagcty cagtataag 1500
agatgttgac tctaaagttg atttaaggcc aggcattg 1537
```

<210> 90

<211> 304

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<400> 90

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tgacaccatg cctgggtaat ttttttaatt ttnattttca gtagagacaa ggttgcgcta 60
tggtgcccgg gctgggtatgg aactcctgtg ctttaagcgg cctcatgcct cggcttccca 120
aagtgctgag gttgcagcta tgagccaccg caccagcctt acattccttc ttatcaccga 180
gaaacagggt gatcttcaca ggtgtaatga gtatgaaggg agtgccataa agatattttt 240
tattttttat ttattttatt ttttaatttaa tttttttttt tttgggatgg gngtcttgct 300
ctgg 304
```

<210> 91

<211> 369

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<400> 91

```
ggtagagatg ggggtctcgtc atggtgacca ggctgggtctc aatctnctgg tctcaggcca 60
tccttccacc tcattctccc caagaactgg gattacaggc atgagcaact gcacctgggc 120
catatgcttc ttatagttga agaagtgaag ggtcaatgac ttactaaaa tactattaaa 180
gtaataaagc taggacttag ccccaattat tcatccttaa agtccaatac tttcaatata 240
ttaagttgct ctttattata tgaattctaa atatcttttt taccttttgt tatctaattct 300
ggaaatccta tataaatgta taattttata catgctgact gatatccyct ctagtcttgc 360
tatactagg 369
```

<210> 92

<211> 315

<212> DNA

<213> Homo sapiens

<400> 92

```
gctttttacc ctctccaaac cttctaacco tagcttcatg aatttatgtt actcgcctag 60
agggctctct ataaatatat acatttgtaa cttctgttta atataaataa atcattcttc 120
atagcaagga ttctggcatc agttggagat tctttggatg gatgtgctcc catggagttt 180
ctattttaat gtactaacia cttatgactc gtctatctgt agtatcaatt atatccacta 240
tcacagtaac agtcaccact taatatgyat agratatctc attttaccac gcaattatgg 300
tatctctgat ttata 315
```

<210> 93

<211> 701

<212> DNA

<213> Homo sapiens

<400> 93

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aacattacaa gggcttttat aaaaaaccct ttgttcatat ttcttccctt taaaatatgt 60
aatgtcaaaa atgactcacc ttttaaaaaat tatgcatgaa aacagggtgg aaacattcag 120
taatacgcta tttctccaac atcaagacaa ctaaaacaaa tgataaaaaat gtttattttt 180
```



```

acactccagc atatacgggtg agtttttaggg atgtgtatga atattttaa atttttaattt 240
cagttttaat gaaagctgaa cttaataggg aaagctagct cttggtaact agcaatgatc 300
aggcattggt tgcctctgtc aggttttctt atctgtttta ggtacatttt ttcagattct 360
gattgtttga gttaatgggt gaatttttaa agtttttagt tactttaa atakgatttttaa 420
attrcatatt aatttagaaa attcctgtgt ttacttatat tttaaattgt gaaatggatc 480
caatcattag aacagagaga atagttcttt gaaactgaaa tacttttagt ttactgacct 540
tgtgtaaaga taatatgaag aaccagcttc caaaagaaac cagcatatgg cactataaac 600
tatttcattt gagcaccatt ctttaccatg gatataatga ttatgtatta tagtgaggatg 660
atcatacagk tcccccaaat gtgatgggtc aagggaattt a 701

```

<210> 94

<211> 459

<212> DNA

<213> Homo sapiens

<400> 94

```

cgggcaactc tctggcatcc ttaatatctt tctatagaaa ttgtgatgaa agaacagata 60
agcctaagta aatctagcgt gtggagctcc tttaaaatgt gaagaccttg ccawctgggt 120
aaaaataaaa cttggttttg tcctaaatat ccttgctggg cctattatac ataaaaaaag 180
gggccacagc ccatttgcaa ggcttctgaa tgaactccat tcattctgta cttggaaatg 240
tctcttcagc cacaaaaaga acaatagtta taacctaat tctttggtgc catatcagca 300
gaagaagagc caagagacca ttatgaaaac tctagtaagt tctcttggtg attatataat 360
gctgtawtca ttgatcatat tkctgtattt aaataagtac atttttttaa acatcataaa 420
gtggatcagt aatgctgtaa tatcacattt catgtatta 459

```

<210> 95

<211> 2589

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1056)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2568)

<223> n equals a,t,g, or c

<400> 95

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ggcacgaggg ctgccctttt gggttccagc cggggtcacg tccagcctcc actgggaaac 60
cagtgactga ggcttgacc cagaggtgga ccaggcatct cctggccacc tgtgacctgg 120
gaagaagcga gtcagtggcc cgttcaacct gctctgcagc tgctataaat agcctccctg 180
tttccaagag gagtaagga agtggtttatc ttctaaaaac cagacgtttc ctgatgctct 240
gagcgttact cagtgtaca gaggagatgc acacgtcccc actatgttct gtcttgagaa 300
ggggacaaga gaaagaggaa aaggagccac tgtactttat tttgcaccta cagcgtgcct 360
tggcactggg ctgagaggc accttcctgc gtgaatcctg tgcggcaggc cttattgcca 420
taataagtca catcaaagac actgctgggc ataaaacact gttttacata ccatagggaa 480
aaacgctgcc aatcttaact aagatgctac aactgtacag ttccttccaa tcagagatgt 540
tcacgtgtga aaaaaaaact gtgctactta caatctatga aagctggtrt tatccactt 600

```

```

ggcaggtaag ggaactgagg tcctgtgagt gaagtgcct catgatcaca caacaggaga 660
tggcagggct gggattcaaa cccgggagtg tctgctgcca catccacac tcccactgcc 720
tggctccaag tcccaggaag ctcgagactg tgagttttct ccttgaaac tcacctggag 780
agagtccggg cacctgtgcc tatgtggagg gttccagccc cagccaggcc cctccgctgc 840
ccacaccctg ggaggagaag cggcctccct tccaggctca tctgctcact gcccgcatc 900
tcctggcaga gctgagggtct gagagatctg gactccaacc caagggccct ctcttggtat 960
tcaggggtgt ccacagttag gragggacct ggggccttgt cccaccacct tcctaggccc 1020
cgtgatcacc accccctcaa gcggggcccc agcccnctga gcacccctc acgtgacca 1080
gccctcggct gttccaggct cactgcccat ggtgtgctct tctgggccac agcagccagg 1140
gctccagggc gaggacrggg gacacctgaa aacacccgt tgttcatggt cttgtgcccc 1200
ttcattcgga gactcctgaa aaactgggct gtttgcaag caaatccagc tccttgtcct 1260
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acgtttccag tccctcgatg ccactaatca gcatggactg tgttcaggac acagggtgaa 1380
cttttctctg acccccggtg ctggtcctgt gccagcacgt agtagttamt cagtagaggt 1440
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ataacgcaca caaagatact ccagaaacat ttgctgagta cctagtacgt gtgagggtgt 1560
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agaacctcct cttcattgga aatgctgggc acattgcagt cagtgagctg ctgccaaaac 1800
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tcggccctgc gcctgcccc gtcctggcag ggggcaccgg ctcaggaaca tgcggcctcc 2040
tggmatttct cggtatTTaa ctgtctcgt gtcttatccg agtccctaata gaaacgactt 2100
gtgtgacaat ctgtctgtgc cttacgaaag tgtctgtgca ctttttatcc tttttaaaag 2160
caacttttaa aagtggatgg ggaggggggc tagcatacgt ggtaggggtt tagaaatctg 2220
tggtcatcgc tgaaatcctt tttgcatcat gttttttgat gttggagtga tgaagtgtac 2280
atccccacc ccacacacca ctacctgtgt acagacctt taaaacatgt cttctttttc 2340
tgattcaata ctgtgacctc tccgatacag tctaatacctt ggggatctgt aatcaagggt 2400
ttaaaccctg ggaagtgggt tgggaagggt ttgcaactgt cttgagtgtt gtgcttttct 2460
gtgttgtgtg ttttgatttt tgtcttttta tctgttttat attgacataa ttttcctgtt 2520
taaaaaata caactttggc ttgttaaaaa aaaaaaaaaa aaaaattnct gcggtccgca 2580
aggaattc 2589

```

<210> 96
 <211> 457
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (372)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (384)
 <223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (442)
<223> n equals a,t,g, or c

<400> 96
gagcacatct ggctctccat atgggaccgg ccgcctcgta gctgtttcac tcgcatccag 60
agggccacct gctgcgttct cctcatctgy ctcttcctgg gcgccaacgc cgtgtggtac 120
ggggctgttg gwgactctgc ctacagcacg gggcrtgtgt ccaggctgar cccgctgagc 180
gtcgacacag tcgctgttgg cctgggtgtcc agcgtggttg tctatcccgt ctacctggcc 240
atsctctttc tcttcyggat gtcccggagc aaggttatca atactctggc tgaccatcgt 300
catcgtggga ctgacttttg tggaaagtcc ttggttactta tcattaactg tgtttctgag 360
aagttataaa tntggcatct cctnctgcac aacttacctt tgggttataa taatctggtg 420
accatcgtca cgttggactg antttggggg aagcctt 457

<210> 97
<211> 516
<212> DNA
<213> Homo sapiens

<400> 97
agctcccacc agcctccttt ttattttttt gtacagatgg ggtcttgcta tgttgcccaa 60
gctgggtctta aactcctggc ctcaagcaat ccttctgcct tggcccccca aagtgtctgg 120
attgtgggca tgagctgctg tgcccagcct ccatgtttta atatcaactc tctctctga 180
attcagttgc tttgcccag ataggagtcc tctgatgcag aaattattgg gctcttttag 240
ggtaagaagt ttgtgtcttt gtctggccac atcttgacta ggtattgtct actctgaaga 300
cctttaatgg ctccctctt tcctctcttg agtatgtaac ttgcaatggg cagctatcca 360
gtgacttggt ctgagtaagt gtgttcatta atgtttatct agctctgaag caagagtgat 420
atactccagg acttagaata gtgcctaaag tgctgcagcc aaagacagag cggaactatg 480
amaagctctc ctgccatctc caagcccact tttcag 516

<210> 98
<211> 314
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (263)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (271)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (299)
<223> n equals a,t,g, or c

<400> 98

ggagaccgcg cgcgggacgg ggaggaatgg cctgtccgcg ttaaaccatc acaagccatg 60
gttgcggaag ggccacgcgt cccccagtag gagaatgact ccgattcgtg accctcagcg 120
ccggtgcatg tcgatcttgg cccccagggc tgtgatgcag ccagccaggt ctcagggaga 180
gggaacccag aagcctggca tgctggccaa aggagtcaag gaaacttttg agctatttac 240
agcttgtagc aattatgtaa agnatactcc nctgaacaaa atttgagca tgtttgttnc 300
tctctacctg attt 314

<210> 99

<211> 679

<212> DNA

<213> Homo sapiens

<400> 99

agttgttccg tgtaggctgt tgttgactct cgtatgaaag cccacgcgat ccaagtgcc 60
tgcaggtttt ggtccagggg aaagttgggc tctgcagatg actgtaaatg actacctgga 120
ggtcgattaa agtgcggtac tgcgggattc arccgatttc cttcttcctc tgactgccc 180
gaaatatcag ccaaaggcca gcgttctaag gacatatgga attggctatg gataattcat 240
atgctttcaa tcaacgaagc acatgtaatg gaattccatc tgagaagaaa aacaacttcc 300
ttgtatcaga agatcatgga caaaaaatct taagtgtact acagaatttt agagaacaaa 360
atgtctttta tgatttcaaa ataattatga aagatgaaat aatcccgtgt catcgttgtg 420
tgtttagcagc atgcagtgac tttttcaggg ctatgtttga agtaaacadg aaagaaagag 480
atgatggaag tgttaccatt actaatttgt cctccaaggc agtaaaagca tttctcgatt 540
atgcctatac tggaaaaaca aaaataacag atgataatgt ggaaatgttc ttccagttgt 600
catcatttct tcaagtttcc ttcctatcca aagcttgcag tgacttttta ataaaaagta 660
ttaatcttga aaaaaaaaaa 679

<210> 100

<211> 599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (584)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<400> 100

aattcggcac gagtctcacc cctcggagac gctcgcccga cagcatagta cttgccgccc 60
agccacgccc gcgcgccacc accatgctag gtaacaagcg actggggctg tccggactga 120
ccctcgccct gtccctgctc gtgtgcctgg gtgcgctggc cgaggcgtag ccctccragc 180
cggacaaccc gggcgaggac gcaccagsgg agggacatgg ccagatacta ctcrgcgctg 240

cgacactaca tcaacctcat caccaggcag agatatggaa aacgatcyag cccagagaca 300
ctgatttcag acctcttgat gagagaaagc acagaaaatg ttcccagaac tcggcttgaa 360
gaccctgcaa tgtggtgatg ggaaatgaga cttgctctct ggccctttcc tattttcagc 420
ccatatttca tcgtgtaaaa cgagaatcca cccatccctac caatgcatgc agccactgtg 480
ctgaattctg caatgttttc ctttgtcatc attgtatata tgtgtgttta aataaagtat 540
catgcattca aaaaaaaaaa aaaaawaaaa aaaaaaaaaa acnngggggg gggcccccgn 599

<210> 101

<211> 1189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (232)

<223> n equals a,t,g, or c

<400> 101

gggggcggga aggcgtgacc gccatgcaca agctctttga ctgggccaat accagccggc 60
gcgggaggag ataagcaagg acctcagagc cactactgaac gccttcctgt accacatggg 120
ccaacacagc aacaaattca tgctggtcct ggccagcaat ctgcctgagc agttcgactg 180
tgccatcaac agccgcattg acgtgatggt ccacttcgac ctgccgcagc angaggagcg 240
ggagcgcctg gtgagactgc attttgacaa ctgtgttctt aagccggcca cagaaggaaa 300
acggcgcctg aagctggccc agtttgacta cgggaggaag tgctcggagg tcgctcggct 360
gacggagggc atgtcgggcc gggagatcgc tcagctggcc gtgtcctggc aggccacggc 420
atatgcctcc aaggacgggg tcctcactga ggccatgatg gacgcctgtg tgcaagatgc 480
tgtccagcag taccgacaga agatgcgctg gctgaaggcg gaggggcctg ggcgcggggt 540
cgagcacccc ctatccggag tccaaggcga gaccctcacc tcatggagcc tggccacgga 600
ccctcctac ccctgccttg ccggcccttg cacatttagg atatgctcct ggatggggac 660
tgggctgtgc ccagggcctc tgtccccag gatgtcttgt ggtggcggtc ggccgttctg 720
ccccccaggg caccctctgt tgtaggcact ggctaggag gggcaggcct ccttcctgcc 780
cctcgagaca ctcttgggag atgcattttc cgtctggctc acagggggag ggtgaggctt 840
tgtaccccag cccctgcccc ggccactgtg aggggtgggtg ctggctgagc ccctggggca 900
gaaggagtgg ggcaggcggg gtctttgttc tcggctccca cagcagagcc aggtgagggg 960
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gggccacgga acccggcagg ggtgtctgag gccgcctgt cagctggccg gtccaagcct 1080
gtggctggag ctggtgtgtg tttatctaataaagtccac aggtgcctca aaaaaaaaaa 1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1189

<210> 102

<211> 251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<400> 102

gccaatgtga tgaagtgcaa agttcaggcc ggtatgattt tnagtgtctg caaagataaa 60

agcttcgatg atgaagaatc agtggatgga aataggccat catcagctgc atcagccttc 120
aagggttcctg cactaaaaca tccggaaatc ctgccaacag tgcaaggaag ctggttcagc 180
agggtggcctt aaggttkgag gttstaaatc catttcaatc tgtratgctg gtccatggcc 240
ttgatattgg c 251

<210> 103

<211> 458

<212> DNA

<213> Homo sapiens

<400> 103

gggaggcttt ctgaattatg ggggcaacat ggggagactg ggctttctgt ggaccatgac 60
agctccgcag ccgtgctggg ctctcagct ccactgtcag ggctaggaat tggccacaga 120
acccccagag ccaaccctgg ggcccactag gaccccaaac acctgtgttt tcattctgcg 180
tggcctcctg gttccctgga gttctttttt atgctgcctc tgggtgtgagg tcctcagcat 240
ttaatttggt ctaagtttaa aagctgcaag agcaaaacag aacccccaaa gcctggggcc 300
cacagctgct gcggctgatc agagatacga cccagagga ccacgtccac cargggccgg 360
atggacagcc acctattttg tamtccttgt ttcaaaagca acaatagcaa ataacattcc 420
aaaagttcta tgaatragact tcaagacact aggattta 458

<210> 104

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (402)

<223> n equals a,t,g, or c

<400> 104

tgtgtgtccg cgcaggcgag caccgcgccg gccctgagcc tcccgcctgc tccccacggc 60
cgcggtgcat gttcgccctc tgccactgtg tgccgagagg caggaggacc atgaaaatga 120
tccactttcg gagctccagc gtcaratcgc tcagccggag atgagatgca ccatccggct 180
gctggacgac tcggagatct cctgccacat ccagagggaa accaaagggc agttttctcat 240
tgaccacatc tgcaactact acagcctgct ggagaaggac tactttggca ttcgctatgt 300
ggacccagag aagcaaaggc actgggcttg aacctaacaa gtccatcttc aagcaaattgn 360
aaactcatcc accatacacc atgtgcttta gagtgaattt anccacatga acccttgaag 420
attaagaag actcacaag 439

<210> 105

<211> 233

<212> DNA

<213> Homo sapiens

<400> 105

```
tcccaaagtg tggggattat aggcattgagc cactatgcc agcctacttt tgtttttaag 60
aaattgaaac gatatagaaa agtacaaaga acaacctaataaacactcat attcccacca 120
ctcagaatta tcaacttttt atcattttat catatttgct tcagatcttt ttttttttta 180
aagaaaagta taacagattt agctaaagta ccctttgacc aataccccac ccc 233
```

<210> 106

<211> 704

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 106

```
ggcagcgggtg gccgaggcct cttggttctg cggcacgtga cggtcggggc gcctccgcct 60
ctctctttac tgcggcgcg ggcgaagggtg gcgggcggga aggggcacgg gcacccccgc 120
ggtccycggg aggctagaga tcatggaagg gaagtgggtg ctgtgtatgt tactgggtgt 180
tggaactgct attgttgagg ctcattgatg acatgatgat gatgtgattg atattgagga 240
tgaccttgac gatgtcattg aagaggtaga agactcaaaa ccagatacca ctgctcctcc 300
ttcatctccc aaggttactt acaaagctcc agttccaaca ggggaagtat attttgctga 360
ttcttttgac agaggaactc tgtcaggggtg gattttatcc aaagccaaga aagacgatac 420
cgatgatgaa attgccaaat atgatggaaa gtgggaggta gaggaatga aggagtcaaa 480
gcttcagggt gataaaggac ttgtgttgat gtctcggggc aagcatcatg ccattctctgc 540
taaactgaac aagcccttcc tgtttgacac caagcctctc attgktcagt atgaggktaa 600
tttccaaaat ggaatagaat gtggtggtgc ctatgtgaaa ctgctttcta aaacaccaga 660
actyaamctg gatmakgtts agaggactat aaactgcctt catn 704
```

<210> 107

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (426)

<223> n equals a,t,g, or c

<400> 107

```
ggaatacccc ctactttctg tggcttcttt cctgtagtag acgatcaagg gtggaatcta 60
cagtccatgg gccctgactt cttgccttcg tctcaaatag actctgcagc cagccatcta 120
tgacgcgccc cagtggcttt gaaatgcaac agaaaccatc acccccgac catgggctcc 180
atgccagtgg gcaaagcaca ggtgcgttca ctgagttccc agcacatagc tgtggcaggc 240
acttggtgat attttgaaat aaaagaatgg aagaatgtgt ccaagctgtg cttccccctt 300
ctaccttact caggacatg gtgccctcct ctctggttyc ctgccctgtg ccamcccccg 360
scccctgcaa gcacagytct tatgtgcaaa gccctgttaa gtgctggagg gattactgat 420
ggcttngggg aagtggcaat ggcat 445
```

<210> 108

<211> 592

<212> DNA

<213> Homo sapiens

<400> 108

```
accaaaactg cacaaagata gaaacaggga cttctgtgct ccttgagctt cacgtgttaa 60
cctgggtccc cagaccaaag accaacaccg caggggtgagt tcatcctctg ccaacagcaa 120
tctttccctt cctctgaggc cagccatccc catcccagga ggcaggggaa gcaagcccg 180
ggagggcagg agagctccca gctcagtga gacgtccac cggccccgaa gcacctcct 240
tgctcacagc tcrgasccca gcttctccct gctgcmaagr taactgcagc yttcagactg 300
acttccatgc ccctctagct agggscatc acttcaagtt caggcgccaa aaaccaagaa 360
agtaaatac acttcataga ctttatttac cttaaaaaat tcctgagttc attcatgtct 420
ccaaaccact agagaacctg aaaattcacc aggaaattgg gcaactgcaa gttatcctgg 480
agactccaga gtcaacactt cattaaatga gaacaatctg gttcatgcgt tgaagctgtt 540
acagtaatca gggcgacatg ggcaggggaa gcgatttttc tgaagctgtg cc 592
```

<210> 109

<211> 381

<212> DNA

<213> Homo sapiens

<400> 109

```
tcaccttgta gagaagaaag tcaacagata atttctaaat tggaaaatca ggaaattaca 60
gtcattataa gagatatatg gggaggatat aaataccaga ataaaaagat aaaagagatg 120
aaaatagtag tctctgggga gctaaagtct aaaatacaaa ggtgtgaggc agaccttata 180
tactacttaa cttgtatact atttatagcc cagtattctg ttttctagac ctgtccaggt 240
gttaagggat ccaatctatg aaccagcaga gacccaatga ctaaagmcaa actttgctgc 300
acactgaaat cacctggggg aatcttttaa aaagtactga cgcttgactc ccaccacaa 360
acagtctgat ttaattgggc a 381
```

<210> 110

<211> 351

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (253)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (322)

<223> n equals a,t,g, or c

<400> 110

```
ctgtccctgc actccgtggc ggaaggcggc tagagcggct ccctctgagc tctccgagag 60
attggtcggg acctgaagcg ttgaggttaa gggcaaggca aggagcaacg aggagttttt 120
cgttacgtta gaaaaatttc gttgcgtgct gaaagcgctt ttacctgtgt tgtatgattt 180
aaccttatga aaatggacag tatttccagt ttacaagtg aggaaagaag attaagaaac 240
ttgcctccgc cangcgtggt ggttcactcc ctgtaatccc agcactttcg gcggccgaag 300
caagcggatc acttgaggtc angagttcga agaccagcct gggccaaaca t 351
```


<210> 111
<211> 1583
<212> DNA
<213> Homo sapiens

<400> 111
gggggcccga ggagatgacg gccggcgggc agggccgaggc cgagggcgct ggcgggggagc 60
ccggcgcggc gcggctgccc tcgcgggtgg cccggctgct gtcggcgctc ttctacggga 120
cctgctcctt cctcatcgtg cttgtcaaca aggcgctgct gaccacctac ggtttcccgt 180
caccaatttt ccttggaatt ggacagatgg cagccaccat aatgatacta tatgtgtcca 240
agctaaacaa aatcattcac ttccctgatt ttgataagaa aattcctgta aagctgtttc 300
ctcwgccctc cctctacgtt ggaaaccaca taagtggatt atcaagcaca agtaaatata 360
gcctaccgat gttcaccgtg ctcaggaaat tcaccattcc acttacctta cttctggaaa 420
ccatcatact tgggaagcag tattcactca acatcatcct cagtgtcttt gccattattc 480
tcggggcttt catagcagct gggctctgacc ttgcttttaa cttagaaggc tatatttttg 540
tattcctgaa tgatatcttc acagcagcaa atggagttta taccaaacag aaaaaggacc 600
caaaggagct agggaaatac ggagtacttt tctacaatgc ctgcttcatg attatcccaa 660
ctcttattat tagtgtctcc actggagacc tgcaacaggc tactgaattc aaccaatgga 720
agaatgttgt gtttatccta cagtttcttc tttcctgttt tttgggggtt ctgctgatgt 780
actccacggt tctgtgcagc tattacaatt cagccctgac gacagcagtg gttggagcca 840
tcaagaatgt atccgttgcc tacattggga tattaatcgg tggagactac attttctctt 900
tgttaaactt tgtagggtta aatatttgca tggcaggggg cttgagatat tcctttttta 960
cactgagcag ccagttaaaa cctaaacctg tgggtgaaga aaacatctgt ttggatttga 1020
agagctaaag agtctgcagc aggattggag actgacttgt gactgcgggc tgggggggca 1080
ttcccagtag gaatgtgaag ccagagggtt cggattcgtg acatccaccc cctgggcaag 1140
tgagagcatc tgcaaaatgc aaagagaact acctcatatg caggatgagc caatggcagt 1200
ctcaagaaat gtactcgggc gacaccttac ctgtggaaag caaatctttt caaaataagc 1260
cactgggact cggtaggtgg agccccagct gctcttctag ggacctatgg ggccttcgtg 1320
gcatctctgt gctgtgtgct ggggaggagg ttgatgtaat ggtgactctt ttctgatcag 1380
caccttgggc gtgattccca aggtcccagc caaagcaaag ggccagttgt ttcagtttaa 1440
acagacatgt ctttagtcta ataaaattag ttaactgcca gtaaagtatt ttgttagctt 1500
tgatgaaagc tatgttggtt tctttcccta atcatcaaag taaataaaaa atcatttcta 1560
aaaaaaaaaa aaaaaaactc tga 1583

<210> 112
<211> 431
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (408)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 112

```
ccggcagcta gagcagctac tgactctggt tcagccatct tcgataaagg caaaaaggta 60
agggaaagtt tccaagcttt aggaagaatt attttttttc aagacgctgt cttccgtact 120
ttcgttatta aacatacggc tcaagtgatc accggtatag acagtgacat cagacatctt 180
tcattagccc tactcaaaaa tggcggcaac gtaatatcct gggccggagt cggttgtaac 240
ccggaagtgc ctttgtaaag gaggggtggt tagacaatcc ggaartggat ggaatgaaga 300
gatgccactt ggcggcccat ggcagctggt agtatcgcg actccgggtm aaggcccgt 360
csagttgcat taccatgggg cagcaccngg ttttaggggc agggacantt ttgttgttca 420
anttgttgct g 431
```

<210> 113

<211> 2842

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2040)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2603)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2656)

<223> n equals a,t,g, or c

<400> 113

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ggtggactcg gagtccgcga gcgctcgtcg caagcggccg cctttccacg gtactccgag 60
cactatgtcg tccccggcgt cgaccccgag ccgccgcggc agccggcgtg gaagggccac 120
ccccgcccag acgcctcgga gtgaggatgc caggatcatc ccctctcaga gacgtagagg 180
cgaggattcc acctccacgg gggagttgca gccgatgcca acctgcctg gagtggacct 240
gcagagccct gctgcgagc rctgctggt ttccagccct ccccaaagtc attcttcagc 300
tatccctctt gactttgatg ttagttcacc actgacatac ggcaactcca gctctcgggt 360
agagggaaacc ccaagaagtg gtgttagggg cacacctgtg agacagaggc ctgacctggg 420
ctctgcacag aagggcctgc aagtggatct gcagtctgac ggggcagcag cagaagatat 480
agtggcaagt gagcagtctc taggccaaaa acttgatgatc tggggaacag atgtaaatgt 540
ggcagcatgc aaagaaaact ttcagagatt tcttcagcgt ttattgacc ctctggctaa 600
agaagaagaa aatggttgga tagatattac tgaacctcta tacatgcaac gacttgggga 660
gattaatggt attggtgagc cattttttaa tgtgaactgt gaacacatca aatcatttga 720
caaaaatttg tacagacaac tcattcttta cccacaggaa gttattccaa cttttgacat 780
ggctgtcaat gaaatcttct ttgaccgtta ccctgactca atcttagaac atcagattca 840
agtaagacca ttcaacgcat tgaagactaa gaatatgaga aacctgaatc cagaagacat 900
tgaccagctc atcaccatca gcggcatggt gatcaggaca tcccagctga tccccgagat 960
```

```

gcaggaggcc ttcttccagt gccagtgtg tgccacacg acccggttg agatggaccg 1020
cggccgcatt gcagagccca gtgtgtgcgg gcgctgccac accaccaca gcatggcact 1080
catccacaac cgctccctct tctctgacaa gcagatgac aagcttcagg agtctccgga 1140
agacatgcct gcagggcaga caccacacac agttatcctg ttgctcaca atgatctcgt 1200
tgacaaggte cagcctgggg acagagtga tgttacaggc atctatcgag ctgtgcctat 1260
tcgagtcaat ccaagagtga gtaatgtgaa gtctgtctac aaaaccaca ttgatgtcat 1320
tcattatcgg aaaacggatg caaacgtct gcatggcctt gatgaagaag cagaacagaa 1380
acttttttca gagaaacgtg tggaattgct taaggaaact tccaggaaac cagacattta 1440
tgagaggctt gcttcagcct tggtccaag catttatgaa catgaagata taaagaagg 1500
aattttgctt cagctctttg gcgggacaag gaaggatttt agtcacactg gaaggggcaa 1560
atctcgggct gagatcaaca tcttgctgtg tggcgaccct ggtaccagca agtcccagct 1620
gctgcagtac gtgtacaacc tcgtccccag gggccagtac acgtctggga agggctccag 1680
tgcagttggc ctactgcgt acgtaatgaa agaccctgag acaaggcagc tggtcctgca 1740
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gaatgaaagt acaagatcgg tattgcatga agtcatggaa cagcagactc tgtccattgc 1860
aaaggctggg atcatctgtc agctcaatgc gcgcacctct gtcctggcag cagcaaatec 1920
cattgagctc cagtggaaac ctaaaaaac aaccattgaa aacatccagc tgcctcatat 1980
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agattggcag tagccgggga atggtttctg cataccctcg acagctagag tcattaatcc 2280
gcttagcaga agcccatgct aaagtaagat tgtctaaca agttgaagcc attgatgtgg 2340
aagaggccaa acgcctccat cgggaagctc tgaagcagtc tgcaactgat ccccggaact 2400
gcatcgtgga catatctatt ctactacgg ggatgagtg cacctctcgt aaacggaaag 2460
aagaattagc tgaagcattg aaaaagctta ttttatctaa gggcaaaaca ccagctctaa 2520
aataccagca actttttgaa gatattcggg gacaatctga catagcaatt actaaagata 2580
tgtttgaaag agcactgcgt ccnctggcag wtgatgattt cctgacagt actgggaaga 2640
ccstgcgctt gctctngaag ccttgtgagc aaggaaggct ccctgcatgt cctgcttgct 2700
gcacgccaca tgggtgtggg ctgcatctca gttggccgcc atcagtgtaa atagagctta 2760
aagtcatggt ttggctgcat aaaaattttc taacttgggt tcaatatttg tagtgaagta 2820
tctgttttca tttttttcac gt 2842

```

<210> 114

<211> 268

<212> DNA

<213> Homo sapiens

<400> 114

```

attttgctgc tgggtgggtg ggctacagca ggctcttgga gccacaccag ggcacgggag 60
tgggtgcagg gaccgtcacc gcgccttcac acgcaccata gtgcccggct aattactctg 120
cttttatgag ccaaggtgtt cccgaaagtg garccagcgc cacgcgtctc yaaggtctcc 180
ataccagcc ttctgccttg cgggtgcccc aagccttgcg cgcattttgc atttgggaaa 240
aaaagtcctg aatgcgaacg tcacccca 268

```

<210> 115

<211> 800

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (673)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (794)
<223> n equals a,t,g, or c

<400> 115
gcgctcggggc ttcggaggcg tgcgggcttc ggaggcgtgc gggcttcgga ggcgwgcggg 60
cttcggaggc gtgcgggctt cgggtgccat ggggactcct cccggcctgc agaccgactg 120
cgaggcgctg ctccagccgct tccaggagac ggacagtgtg cgcttcgagg acttcacgga 180
gctctggaga aacatgaagt tcgggactat cttctgtggc agaagagaa atttagaaaa 240
gaacatgttt acaaaagaag ctttagcttt ggcttggcga tttttttac ctccatacac 300
cttcagatc agagttggtg ctttgtatct gctatatgga ttatataata cccaactgtg 360
tcaacaaaa caaaagatca gagttgccct gaaggattgg gatgaagttt taaaatttca 420
gcaagattta gtaaagcac agcattttga tgcagcttat attttttagga agctacgact 480
agacagagca tttcacttta cagcaatgcc caaattgctg tcatatagga tgaagaaaaa 540
aattcaccga gctgaagtta cagaagaatt taaggacca agtgatcgtg tgatgaaact 600
tatcacttct gatgkattar aggaaatgct gaatgggtcat gatcattatc agaacatgaa 660
catgtaattc agntgataaa gtccaagcca gataaggcct taacttgata aaggatgatt 720
tttttgacaa tattaagaac atagtttttg agcatcagca gtggcccaaa gaccgaagaa 780
tccatcctta aggncaaac 800

<210> 116
<211> 646
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (556)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (592)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (615)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (645)
<223> n equals a,t,g, or c

<400> 116

```

aacaaaggca ttgccatcta caagaaggat ttcttccttg tgcagaagct ggtgagctgg 60
gctctgtttc agggcaaatg agggccagga gctgcctgtg tgactttggg gctccctctg 120
ccagtgacca atccctctta aaaagcagtc aggtcaatgc tactgagtag cctcagagag 180
aatttcctaa acaatacaag aaagagaaag atagggtctct tttccctttt ggttctaagc 240
atccttttct cacttcaggg taggggtggc aagctctggg gtctcaatcc agaaggaggc 300
ctaagtgggc atcagactta aaataggcag gaggaagatg cggaggaggg tggcaaktg 360
aggtgagcca ttcccagag gaagatgcag ggggagggca ccctggggtg aaggccactg 420
agagccagca agtgcctgcg gactgacctg ggggcctctg cccacttctt ttgaccaga 480
gttgccctcc agtaactcag ctgttcaagc ccacattccc taagatttat cttgtcctct 540
ctcccatatt cttctnggaa aagcagatgc tttgctaata ccaaggaatt gnattttttc 600
cagccctggt ttcanaaaaat ctggggcttt ggggaaaaaa aattnt 646

```

<210> 117

<211> 1534

<212> DNA

<213> Homo sapiens

<400> 117

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gcgacctcgg ccataagcgc ctgcgcagtc gcggggcccgc cggccgtgct gttcccgcga 60
attcctgtgg taatccttac cgtggcgagt tccgcgctca atggagacgt ttgacccac 120
cgagctgccc gagctgctta aactttatta ccggaggctc tttccctact ctcagtacta 180
tcgctggctc aactacggtg gagtgataaa gaattacttt caacaccgtg aattttcatt 240
cacattgaaa gatgatattt acattcgcta ccaatccttc aacaaccaga gtgatctgga 300
aaaggagatg cagaaaatga atccatacaa gattgatata ggcgcagtat attctcacag 360
acccaatcaa cacaatacag tgaagctggg agctttccag gctcaggaaa aagaactggg 420
at ttgacatt gacatgacag actatgacga tgtgaggaga tgttgtagtt ctgcagacat 480
atgtcctaag tgctggaccc tcatgacaat ggccatacgc atcattgaca gagcattgaa 540
ggaggacttt ggatttaagc atcgtctctg ggtatattct ggaaggagag gtgttcattg 600
ttgggtctgt gatgaatcag ttagaaactg tcttctgcar tacgttcygg gatagttgag 660
tatttgagcc ttgtaaaggg tggtaagac gttaaaaaga aagttcacct aagtgaaaaa 720
attcaccctt ttatcagaaa atctataaac ataataaaaa aatactttga agaataatgcy 780
ttggttaatc aagatattct cgaaaataaa gaaagctggg ataagatttt agcccttgtc 840
ctgaaacaat tcatgatgaa cttcaacaaa gcttccaaaa gtctcacaat tcacttcagc 900
gttgggagca cttgaagaaa gtagccagca gatatcagaa taacatcaaa aatgacaaat 960
atggaccctg gctggagtg gagattatgc tccagtactg tttccacgg ctggatatca 1020
atgtcagcaa aggaatcaat catctactga agagcccttt tagtgttcat cctaaaacag 1080
gtcgcattmtc tgtgcctatt gatttgaga aagtggacca gtttgatcca tttactgttc 1140
cgaccataag cttcatctgc cgtgaattgg atgccatttc cactaatgaa gaggaaaaag 1200
aggagaatga agctgaatct gatgtcaaac atagaaccag agattataag aagaccagtc 1260
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gagaacttct taagaagagt gatttacaaa aagatttctg aagacagagc tcctcaaacc 1380
attgtggata tcttctgcct tcaaccacag atcaaatact tcaagagcca tttaataaat 1440
atggcagaac tatatatgtg tcttaaacct caaagtaaat tttccttgag aaataaaaaa 1500
aaaaaaaaa aaaaaagtcg agactagttc tctc 1534

```

<210> 118

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (155)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (307)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (333)
<223> n equals a,t,g, or c

<400> 118
tagatgaaga taatgaaaaa gaaaaaaggg actcttttagg caatgaagaa tctgttgata 60
aaacagcatg tgaatgtgta aggagtccaa gggagtcttt ggatgacctg tttcaaatat 120
gttctccatg cgccattgca agtgggtcttc ggaanacctg gctgaattga caacattatg 180
tttggagttg aatgtattga attctaagat caaaagcacc agtggracat gtgggaccac 240
actttgccaa cagtaactct cctgaaattc tgggcttgcc atttccttga aagaagtact 300
tttttcntcc ggaacttgga aaagagcgaa ggnagagta 339

<210> 119
<211> 665
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (616)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (656)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (665)
<223> n equals a,t,g, or c

<400> 119
aaagagtgtc cctagttgta acagaaactg tcgatgcagg tttatttgga gaaggaattg 60
tggagagttt gattcatgca tgggagcatt tactttttaca gccaaagacc aaaggtgaaa 120
gtgctaattg tgaaaagtat gggaaagtta taccagcaag tgctgttata tttgggatgg 180
cagtagaatg tgcaagagata agaagacatc atagagtggg tattaaggac attgctggta 240
tccatttgcc aacaaatgtg aaatttcaga gtccggctta ttcttctgta gatactgaag 300
aaacaattga accttataca actgaaaaga tgagtcgagt tcctggmgrp tatttggctt 360
tgacagagtg ctttgaaatt atgasagtag atttcaacaa ycttcaggaa ttaaaaagtc 420
ttgcaactaa raarcctggt aaaattggta ttctgttat taaagaaggc atattagatg 480

```

ctgttggtgtt ttggtttgta ctccagcttg atgatgaaca tagtttatcc acaagtccta 540
atgaggaaaac atgttgggaa caagctgtct accctgtaca tgaccttgca gactaccgga 600
taaaacgtgg ggaccngtga tgatggaatg tcttggtccaa gattgttact taagantcca 660
gaatn                                         665

```

<210> 120

<211> 622

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (544)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (603)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (614)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (620)

<223> n equals a,t,g, or c

<400> 120

```

gagggctgcg ggaggcggga ggaaaaagtg gggccggggc tgagttgggc tgacctgtga 60
aagtctggga aggtctgcga gagaagcgga gtgttttcag ctccggaagt ggcagttgta 120
aacttcacct cccggggggt cttccccttc tgtaccctt tgctgtttgt cccctcctc 180
ccgggtcctg gagtcogtcg tgttccaaca gtttttgctc ttattcccgt gggctgctgg 240
gcctcctttc acccgtgaga cttggarcgg ccctggggtc ttgggtgtca agcacggatc 300
acgcgagacc cctgagacct caaatcatct aacgtgaagc cacagacatc ttggcaattt 360
taatcatcaa gaaagaaata tgtcattaag aaatagcagg gtattttgaa agaagttgga 420
aaacatcatg aatttgaata ctttaagtaa tactgggtgat acccaaaggt tgaagattgc 480
ctcattggat gtaaaacaaa tacttaaaaa tgaacacagag ttggatatta ctggataatc 540
tcangaagaa actccattgg gctaaaaaag aaaagtntga aataccacca accccatgga 600
aancttgcaa gctntgaagn ca                                         622

```

<210> 121

<211> 889

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (830)

<223> n equals a,t,g, or c

<400> 121

```
ggctgaagcc atccccttgg ctgatcagcc acatctgttg cagccaaatg ctagaaagga 60
ggatcttttt ggccgtccaa gtcagggtct ttattcttca tctgccagta gtgggaaatg 120
tttaatggag gttacagtgg atagaaactg cctagagggtt cttccaacaa aaatgtctta 180
tgctgccaat ctgaaaaatg taatgaacat gcaaaaaccgg caaaaaaaaag aaggggaaga 240
acagcccgtg ctgccagaag aaactgagag ttcaaaacca gggccatctg ctcatgatct 300
tgctgcacaa ttaaaaagta gcttactagc agaaatagga cttactgaaa gtgaagggcc 360
acctctcaca tctttcaggc cacagtgtag ctttatggga atgggtatatt cccatgatat 420
gctgctagga cgttggcgcc tttctttaga actgttcggc aggggtattca tggaagatgt 480
tgagcagaaa cctggatcaa tcctaactga attgggtggt tttgaggtaa aagaatcaaa 540
attccgcaga gaaatggaaa aactgagaaa ccagcagtca agagatttgt cactagaggt 600
tgatcgggat cgagatcttc tcattcagca gactatgagg cagcttaaca atcacttttg 660
tcgaagatgt gctactacac caatggctgt acacagagta aaagtcacat ttaaggatga 720
gccaggarar ggcagtgggt tagcacgaag tttttataca gccattgcmc aagcattttt 780
atcaaataaa aaattgccma atctagagtg tatccnnaaa aaaaaatttn ggcccccca 840
aaaaccctaa aaaaaggggc caaccctcaa ccaccaagg gtttttttaa 889
```

<210> 122

<211> 132

<212> DNA

<213> Homo sapiens

<400> 122

```
cttgagcccc tgagttgttg gggtaggggtg aagagcatat cccacaagag gccccacagg 60
gagcagagac tgctttaatc cctgctgaca tcacggaaaa gcaacagagc cttttcaact 120
ttgtcactat gt 132
```

<210> 123

<211> 1900

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1879)

<223> n equals a,t,g, or c

<400> 123

```
gcggacgcnt gggaaacagc cgattggaga cgggagccaa ccagggctgc attggaggtt 60
gaaatcacaa agattagaca cttttttaga taggtgttct tcagcaccac tgacaacacg 120
gttctgacag tatttcatga caatggatgg tgacagttct acaacagatg cttctcaact 180
aggaatctct gcagactata ttggaggaag tcattatgtt atacagcctc atgatgatac 240
tgaggacagc atgaatgatc atgaagacac aaatggttca aaagaaagtt tcagagaaca 300
agatatatat cttccaatag caaacgtggc taggataatg aaaaatgcc aacctcaaac 360
gggaaagatt gcaaaagatg ccaaagaatg tgttcaagaa tgtgtaagtg agttcatcag 420
ttttataaca tctgaagcaa gtgaaagggtg ccatcaagag aaacggaaaa caatcaatgg 480
agaagatatt ctctttgcta tgtctacttt aggctttgac agttatgtgg aacctctgaa 540
attatacctt cagaaaattca gagaggctat gaaaggagaa aagggaattg gtggagcagt 600
cacagctaca gatggactaa gtgaagagct tacagaggag gcatttacta accagttacc 660
agctggctta ataaccacag acggtcaaca acaaaatggt atgggtttaca caacatcata 720
tcaacagatt tctggtgttc agcaaatca gttttcatga tctgaagaaa tgatggaatg 780
gggagtgtag agaaatgaga gtctgtatga ttctggaaca gagacatcag aaggaaagac 840
tggtgaaaag atgtatcttt gtatattaat agctgtaatg tagcttcctg atgcttgact 900
aattgagggtg ttaattctga cttgagaatc tttttcatga atgattttta agaaaaattt 960
ggatttttaa ggtattaaaa tatttttggt ttgtacgaga gtttggttgc ctgtatgact 1020
cctgtatgca ttgtatattg caatttatta ctgtcagaga tttgtagaca gtttcttatt 1080
ttcatattga atcatgttac ttttgtaatt caagtaagcg gctgggttaa ttcattgatg 1140
ttgccctttt aataaaaatat aagggtagag ttcattttga atgcaagttg cttttattat 1200
aaatttgagt ttgtcttggt tataccttgc atgataacct agctagattt ctagcatttg 1260
ctgtattttat taaaattatt atttttttgg taaaacatta atagtttaag cagcatcatt 1320
tttttaaaaa atgtaattga ataagtgtga atgcagaagc aaatattgtc tgccctgtta 1380
aacttggtgc ccattaacag tgtttacact gttcatcgtg cctgttaatg tagttttagt 1440
taytgagct tttttaagac tagatttggt tttagattac atttttaaga atgtgggaat 1500
atatttaagt ttaatgtagt cctagtgtc ttgaaatggt gcccttttca tttggtacat 1560
gatttttttt caaatcatat cttcaagtac tatagtattc tcttacagaa gaggagtttt 1620
atagtctgat ggtaaagtgc ttcattttac ctttttaatt gaaatgtcaa gtttcctgtt 1680
acactatgga aaccaagaaa catcagacat cattgcgtgt acagaccttt tgcattgggtg 1740
agtggatgaa atggagaaca gagtgagtgc tgtgaacggt gtgaaataga agccaacttc 1800
tagtatgtct tcttcatctc tgcaataaac taaacgtaaa taawrwaaaa aaaaaaaaaa 1860
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1900
```

<210> 124

<211> 1250

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (874)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1169)

<223> n equals a,t,g, or c

<400> 124

```
ggcacgagga ggaaactaac gattccctgc ccacccccac acccagcacc accaacaggt 60
gggcaagctt gccgagaaaa cgcagagggc atcctgtgag cagcaaacac atctgagcct 120
ggaaaagacg cagagaagta aaagatcaaa gtctgattgg caccggctcc cattccggct 180
ccagcctcca atccgacccc catttcggct gcagcctcgg acctagctcc ggccctcgg 240
ctatccggtt gcatcctccc tccctgttcc ggatcttata ttgcgccagc gcctactcca 300
ggatcccgtg gccagacctc aagccatggc tggcccttc tcccgctcgc tgtccgcccg 360
cccgggactc aggtccctgg ctttggccgg agcggggtct ctagccgctg ggtttctgct 420
ccgaccggaa cctgtacgag ctgccagtga acgacggagg ctgtatcccc cgagcgctga 480
gtaccagac ctccgaaagc acaacaactg catggccagt cacctgaccc cagcagtcta 540
tgcacggctc tgcgacaaga ccacaccac tggttggacg ctagatcagt gtatccagac 600
tggcggtggc aaccctggcc accccttcat caagactgtg ggcatgggtg ctggagatga 660
ggagacctat gaggtatttg ctgacctgtt tgaccctgtg atccaagagc gacacaatgg 720
atatgacccc cggacaatga agcacaccac ggatctagat gccagtaaaa tccgttctgg 780
ctactttgat gagaggtatg tattgtcctc tagagtcaga actggccgaa gcatccgagg 840
actcagctcg cctccagctt gcactcgagc agancgacga gaggtggaac gtgttggtgt 900
ggatgcactg agtggcctga aggtgacct ggctggacct tactataggc tcagtgaagt 960
gacagaggct gaacagcagc agcttattga tgaccacttt ctgtttgata agcctgtgtc 1020
cccgttgctg actgcagcag gaatggctcg agactggcca gatgctcgtg gaatttggca 1080
caacaatgag aagagcttcc tgatctgggt gaatgaggag gatcatacac gggatgatctc 1140
catggagaag ggtggttaaca tgaagagant gtttgaaaga tctgccgagg cctcaaagag 1200
gtrgagagac tatgtagggg actaggtggg aggacataag gaaaaccaa 1250
```

<210> 125

<211> 1189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1041)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1136)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1144)

<223> n equals a,t,g, or c

<400> 125

```
ctttttttaa cccttttaggt atctgatcgc tttgccaaatt ttgcgttact gggcaggcta 60
agagatcttc ttttaattca gcctgcttaa gacgggaact gataactgta gtgtatcctc 120
tgcccttttt cttatctatt ggaggaagct cagatgggtg cacaagaagg atctgaagtg 180
gagcttctag tatccccagg agcgcgaagt gaacacggaa ggtacctgca ggatccaatt 240
gtgtccattg atctctcaga gtggctgagg ataataagagt ttcttcttca aggtctcaag 300
gtctgaagca tcccacagaa tgatcctact gaataactcc cataagctgc tggccctata 360
```

```

caaatccttg gccaggagca tccctgagtc cctgaagggtg tatggctctg tgtatcacat 420
caatcacggg aacccttca acatggaggt gctgggtggat tcctggcctg aatatcagat 480
ggttattatc cggcctcaaa agcaggagat gactgatgac atggattcat acacaaacgt 540
atatcgtatg ttctccaaag agcctcaaaa atcagaagaa gttttgaaa attgtgagat 600
cgtaaactgg aaacagagac tccaaatcca aggtcttcaa gaaagttag gtgaggggat 660
aagagtggct acattttcaa agtcagttaa agtagagcat tcgagagcac tcctcttggg 720
tacggaagat attctgaagc tcaatgcctc cagtaaaagc aagcttgga gctgggctga 780
gacaggccac ccagatgatg aatttgaaag tgaaactccc aactttaagt atgccagct 840
ggatgtctct tattctgggc tggtaaata caactggaag cgagggaaga atgagaggag 900
cctgcattac atcaagcgt gcatagaaga cctgccagca gcctgtatgc tcggcccaga 960
ggagatcccg gtctcatggg taaccatggg acccttcttg tgaagtagga atggcctaca 1020
gcatggaaaa ataccgaaga ncaggcaaca tgggcacgag tgatggtgcg atacatggaa 1080
atatctgcgt cagaaggaat atttccattt ttacatctct gtgttgggaa ggaaantgaa 1140
ggantccccg cagatttgtg gggggcagtt ttggttctt ttgaggcct 1189

```

<210> 126

<211> 428

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (388)

<223> n equals a,t,g, or c

<400> 126

```

gaggtcctga gagactgtra gagccccaac tccattagta ttatgggcct caatacttcc 60
cgggttgcaa ttaccctgaa gcccgaagac cctatggaac agaacgtagc tgagctggtg 120
cagttcctgc tgggtgaagga tcagagcaag taccctatcc gggagtctga aatgcgggaa 180
tatattgtta aagaatatcg caaccagttt cctgagatac tcaggcgagc agcagcccac 240
ctggagtgca ttttttaggtt tgaattgaga gaacttgacc ctgaggcaca cacctacatt 300
ctgttaaaca aactgggacc tgtgcccttt gaagggttag aagagagccc aaatgggcca 360
aagatgggcc tcctgatgat gattctangc caaatattcc tgaatggcaa ccaagccaag 420
gaggctga 428

```

<210> 127

<211> 645

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (255)

<223> n equals a,t,g, or c

<400> 127

```

acgcggtcgg ccgggagccg gggaggagcg tggacgccgg cctggcaggt acccccgcga 60
gaacgtggga gccggtgtat ttcagctgca tttattactg atctcgggct gcaccagggc 120
actttagga ccgactaaa aacagcggaa agtgaggagc caagcctggg tccggggcgg 180
cccgccgtac agctggcctc acggattcca ctgcctgcgc ctgcagatga cttgttctgg 240
agagtagaga atgtnctcgg atttaaagta caatccggtt tcctttccat tcattatagt 300

```

```

tgcctacact caacaaacaa aagttgggaa agataaaggg attattctag cgcgtcacat 360
tgacaaacac cgacgttaac acgctcagtc cagcctgact cacttgccctc aggtcagaga 420
ggtcaccact gacgacgccg ggccctcaag ccgatacctaa tccagcttgg ttctctcagc 480
ctcagccaga ccatccgttc ttgcctctgt cccaccacgt gcaggtgtaa gyttccgccg 540
cacttcttgt ctgaatctgc caaggaagga aactggcatc tttcagctta aattcttttt 600
cacttgatca ggggtaggag tttaggcggg tttttttttt aagga 645

```

<210> 128

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (481)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (490)

<223> n equals a,t,g, or c

<400> 128

```

ctggagtctc aacgacgcgc acacgagaag taaggagcgg aaggtgggaa agggccggaa 60
aacacacggt cctccgaaac cggtttgcaa gtccttgtag agagtgatag attcgtgtgg 120
cctttcaaag gattgtgaag tgggtgaaat ggatccaaaa taataagtga cttctctacc 180
aaagcataga agattcttca tatctccttc cagtggctca atttagattt tgggaargag 240
cagaacaagt gaaacacaga aaactgaaga gaagaaatcc tcattttgga cctatatattc 300
tccttgacta tttcttaata tccatcctac ccatcgttct aatgttttaa ctttgctctg 360
aatttataaa tagtaaaggc caaagacata gaatatacat ttagtagctt tataccaaga 420
aatttgccct gaaagctgct gtscgtggag gggaaagtgt agcaaattcc tggcnatttg 480
naattttaan ttattg 496

```

<210> 129

<211> 424

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (313)

<223> n equals a,t,g, or c

<400> 129

```

ctggcggccg caggagcgcg tgcggcgtgg actttgccgg gctcgccaca cagccccaga 60
cccgtttagg accgggagac cgaacgcagc gwccagccgg ggagtttcgg cggcgttctc 120

```

cgggcaccgc ggcgcgaagc cagacgcagc ggggggacac atctcgcggt ggcgttgcca 180
gagtgaggag ttagcaggca ggacttgacg aggcctctttg gtttttctag tcctcaacca 240
ctgaagaaga agcttgatgc ttggctgtca gaagacatga attacgcacg gttcatcacg 300
gcagcgagcg cancagaaac ccttctccca tccggaccat gactgacata ttgagcagag 360
gaccaaatac gatgatctcc ttggctgggt gcttaccaaa tccaaacatg tttcctttta 420
agac , 424

<210> 130

<211> 1709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1028)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1168)

<223> n equals a,t,g, or c

<400> 130

tggaccgcag cttcctggaa gacacaaccc ccgccaggga cgagaagaag gtggggggcca 60
aggctgcccc gcaggacagc sacagtsatg gggaggccct gggcggcaas ccgatggtgg 120
carggttcca ggacgatgtg gacctcgaag accagccacg tgggagtccc ccgctgcctg 180
caggccccgt cccagtcgaa gacatcactc ttctcagtgga ggaggaagca gaagtggcag 240
ctcccacaaa aggccctgcc ccagctcccc agcagtgtctc agagccagag accaagtggg 300
cctccatacc agcttcgaag ccacggaggg ggacagctcc cacgaggacc gcagcaccac 360
cctggccagg cggtgtctct gtctgcacag gtccggagaa gcgcagcagc accaggcccc 420
ctgctgagat ggagccgggg aagggtgagc aggcctcctc gtcggagagt gaccccgagg 480
gacccattgc tgcacaaatg ctgtccttcg tcatggatga ccccgacttt gagagcgagg 540
gatcagacac acagcgagc gcggatgact ttcccggtgcg agatgacccc tccgatgtga 600
ctgacgagga tgagggccct gccgagccgc cccacacccc caagctccct ctccccgcct 660
tcagactgaa gaatgactcg gacctcttcg ggctggggct ggaggaggcc ggacccaagg 720
agagcagtga ggaaggtaa gagggcaaaa cccctctaa ggagaagaag aagaagaaga 780
aaaaaggcaa agaggaagaa gaaaaagctg ccaagaagaa gagcaaacac aagaagagca 840
aggacaagga ggagggcaag gaggagcggc gacggcggca ncagcggccc ccgcgcagca 900
gggagaggac ggctgccgat gagctggagg ctttcctggg gggcggggcc cgggcggccg 960
ccaccctggg ggtggcgact acgaggagct ctaggccggc gtgggcagtg gccgccctgg 1020
ggcggggngc gtgcctgtca ctgcctgggg aggcatttgc ntctgtacca tcgcctttgc 1080

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cgctgccccg tggctgccgt gtgcgcttct gagctggaag aggccgggca ttggtggtcc 1140
ccaggctggg ccctgcaggt gctgggcntt cagccyagtg tgagcctgct ctgcaagaag 1200
ggaggggaca gctggcttca gccaggctcg gtggacaccc tggccctctc ggggcagagc 1260
cgccagtgtt tctcagggat gtgactgagg cccaggaggg acctgtgagg gtctgtttac 1320
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tccgcgctca tctggggccg cagcatgcct atggttccgc ttccggcccg gagccctgaa 1440
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agctgcgccc ccgctcaggt gagcccgaag gcaggagccg ggaggcactc ctcccaaaca 1620
ctccactcag accataaagc actcctgttt cactctgaaa aaaaaaaaaa aaaaaaaaaa 1680
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```

<210> 131

<211> 866

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (683)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (723)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (740)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (813)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (841)

<223> n equals a,t,g, or c

<400> 131

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ctcgctcgga ttggttcagt gcactctaga aacactgctg tgggtggagaa actggacccc 60
aggtctggag cgaattccag cctgcagggc tgataagcga ggcattagtg agattgagag 120
agactttacc ccgccgtggt ggttgagggg cgcgcagtag agcagcagca caggcgccgg 180
```

```

tccccgggagg ccggtctctgc tcgcgcgcgag atgtggaatc tccttcacga aaccgactcg 240
gctgtggcca ccgcgcgcgcg cccgcgcgtgg ctgtgcgcgtg gggcgctggg gctggcgggg 300
ggcttctttc tcctcggtt cctcttcggg tggtttataa aatcctccaa tgaagctact 360
aacattactc caaagcataa tatgaaagca tttttggatg aattgaaagc tgagaacatc 420
aagaagtctt tatataatct tacacagata ccacatttag caggaacaga acaaaacttt 480
cagcttgcaa agcaaattca atcccagtg aaagaatttg gcctggattc tgttgagcta 540
gcacattatg atgtcctgtt gtcctaccca aataagactc atcccaacta catctcaata 600
attaatgaag atggaaatga gattttcaac acatcattat ttgaaccacc tyctycagga 660
tatgaaaatg gttcggatat tgnaccacct ttcagtgtt tctctcctca aggaatgcca 720
ganggcgatc tagtgtatgn taactagcac gaactgaaga cttctttaaa ttggracggg 780
acatgaaaat canttgctct ggggaaaatt gtnattgcca agatatggga aagttttcaa 840
naggaaataa ggggttaaaaa tgccca 866

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<210> 132

<211> 1593

<212> DNA

<213> Homo sapiens

<400> 132

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gttgtagtga gctgagatca tgccactgca ctccaacctg ggtgacagag cgagactcca 60
tctcaaaaat aaataaataa ataaataaat aaaaccttaa tttgatggg gttttatgtc 120
tgccatttcc atttagattc aaagaatcct aagaataatg gtggagcaaa gcttattttt 180
ctgttttttg aatcttgtaa ggcatgggtc caaacccaat gaaatgggtc caaaaagtcc 240
tgcagctgga actagagcta gagtctaagg gttctgatcc ttagctccaa ggccttctca 300
taaactcctt gacactttca cctccaaca cagtcagtca gtctctgtt tcttggttg 360
gtttctatat aaaactttcc attttgagta atgatctttc cctcttgct tttctctac 420
atattccaat aaagacctt tttgtcttca actcctgtca cttggattcc aggacttctt 480
ccatccctca tgtttgttcc ttactttgcc agcctcggcc atttctgtat cccctgcct 540
gggkttgctg ccctttatgc tcctamctca ccaggtaaca ggaacatgaa gatggctata 600
tgcggctgca gctggttcgc tamgagagt tagagctgac acagcaactg ctgcggaac 660
cacaagaggg atcgggctgg gaacgtcgt gaacgagagc agcctgcarg gsattattct 720
agaaacagtg ccaggggagc caggacgtaa ggaagaggaa gaggagggca agggtagcga 780
agggacagcc ctctcagcct ctcaggacaa cccagttct gtcatccacg tggatgaatca 840
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tggattcttt gaggggatcc tggatgtgtg tgttctgtt aaagaggctg ttatcaggct 1260
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aaaaaaaaaa aaaaaaaaaa aaaaaactcg tag 1593

```

<210> 133

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<400> 133

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tcctttctgac gtcaatgtga tggcgggaatc gctgaaggat atggaagcag atgcgcagaa 60
actgtaccag ttaatctggc gtcagttcgt tgccctgccag atgaccccag cgaaatatga 120
ctccacgacg ctgaccgttg gtscggggcga tttccgcctg aaagcacgcg gtcgtatttt 180
gcgttttgay ggctggacaa aagtgatgcc tgcgttgctg aaaggcgatg aagatcgcat 240
cttaccagca gttaataaaag gcgatgctct gacgctcgtt gaacttacac cagcccagca 300
ctttaccaag ccgccagccc gtttcagtga agcatcgctg gttaaagagc tggaaaaacg 360
cggtatcggt cgtccgtcta nctatgcgtc gatcatttcg accattca 408
```

<210> 134

<211> 2741

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1673)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2736)

<223> n equals a,t,g, or c

<400> 134

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cggcgtaag acttcgtagg gttagcgaaa ttgaggtttc ttggtattgc gcgtttctct 60
tccttgctga cyctccgaat ggccatggac tcgtcgcttc aggcccgcct gtttcccggg 120
ctcgctatca agatccaacg cagtaatggg ttaattcaca gtgccaatgt aaggactgtg 180
aacttggaaga aatcctgtgt ttcatgtgaa tgggcagaag gaggtgccac aaagggcaaa 240
gagattgatt ttgatgatgt ggctgcaata aaccagaac tcttacagct tcttccctta 300
catccgaaga caatctgccc ttgcaggaaa atgtaacaat ccagaaacaa aaacggagat 360
ccgtcaactc caaaattcct gctccaaaag aaagtcttcg aagccgctcc actcgcatgt 420
ccactgtctc agagcttcgc atcacggctc aggagaatga catggaggtg gagctgcctg 480
cagykgcaaa ctcccgaag crgttttcag ttctcttcg gaggaatca tgtcttgatga 540
aggaagtga aaaaatgaag gaacaagcga gaagagaaga aggcccagaa ytctgaawtg 600
agaatgaaga gagctcaggw gtatgacagt agttttccaa actgggaatt tgcccgaatg 660
attaaagaat ttcgggtac tttggaatgt catccactta ctatgactga tcctatcgaa 720
gagcacagaa tatgtgtctg tgttaggaaa cgcccactga ataagcaaga attggccaag 780
aaagaaattg atgtgatttc cattcctagc aagtgtctcc tcttggtaca tgaacccaag 840
ttgaaagtgg acttaacaaa gtatctggag aaccaagcat tctgctttga ctttgcattt 900
gatgaaacag cttcgaatga agttgtctac aggttcacag caaggccact ggtacagaca 960
atctttgaag gtggaaaagc aacttgtttt gcatatggcc agacaggaag tggcaagaca 1020
catactatgg gcggagacct ctctgggaaa gcccagaatg catccaaagg gatctatgcc 1080
atggcctycc gggacgtctt cctcctgaag aatcaaccct gctaccggaa gttgggcctg 1140
gaagtctatg tgacattctt cgagatctac aatgggaagc tgtttgacct gctcaacaag 1200
```



```
aaggccaagc tgcgcgtgct ggaggacggc aagcaacagg tgcaagtggg ggggctgcag 1260
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agaacctctg ggcagacatt tgccaactcc aattcctccc gctcccacgc gtgcttccaa 1380
attattcttc gagctaaagg gagaatgcat ggcaagttct ctttggtaga tctggcaggg 1440
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aactctagga cttgcatgat tgccacgata tcaccaggca taagctcctg tgnaatatac 1680
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gattccaggc aatttatcca aggaagagga ggaactgtct tcccagatgt ccagctttaa 1860
cgargccatg actcagatca gggagctgga ggagaaggct atggaagagc tcaaggagat 1920
catacagcaa ggaccagact ggcttgagct ctctgagatg accgagcagc cagactatga 1980
cctggagacc tttgtgaaca aagcggaatc tgctctggcc cagcaagcca agcatttctc 2040
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aaaaaaaaaa aaaaaaaaaa aaaaaagggg gggggncccc c 2741
```

<210> 135

<211> 686

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (638)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (655)

<223> n equals a,t,g, or c

<400> 135

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gaattacaga gaaaacacac ctgcacgcgc actctctcgt acacgctgtg cggcttctgt 120
ttggttggcc agttcgtccc aatttccgac tcacaggctg cggagcagca actctcacga 180
tatttgctcg acccgtaggc gtatccgctg ccgggttctg gcgcgccctt tcagttctgc 240
ttgctgtcsg caccgctgcg ttacccggaa ccgccgggac gaacagcatg acgtccgctt 300
tggagaacta catcaaccgt atcctcaagc tggcgccgcg ggcgtgagcc ggggtcgcgg 360
agaggccgcg gtcggggatc ggtgggaggt tgggaggcct ggcctcggcg ggatcctggg 420
ggcgggagag gagatgaggg ccccggaacg acccagagtt cgccggcggc gcctcagacc 480
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ttcccgtgctgc tgcggggccca rgggtcccttt ccatttttgcc tgcaaaaccc aaataaaaaac 540
ccagtgtgat tattccgaac ttttctgtct taaaaaaaaat gtacgctctt gattcttact 600
tactattttcc ctatggcata agtggttaaag tttgtganta agatgaacag tcgtncctggc 660
ggcgacaaca gtttgcaatc tttgta 686

<210> 136

<211> 242

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (229)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<400> 136

cagcttactc tcaatatatc tctcttactc tctctctctc tctctttttt ttttaatatg 60
gtgaaattag accaggggtc agaacataga ttttagtctc ctttagttca tctactagga 120
gactaaatta gataatctct aaactccctt ttagttctaa aattctgtaa ttaactcta 180
gcatatcatc attttagact aaaagttttc ttcttctctc tcttttttnt tttgggtttt 240
tn 242

<210> 137

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (445)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (534)

<223> n equals a,t,g, or c

<400> 137

caggaagagc ccaactgggt atcagaataa gccacatgca ctttctgaaa ctgcccacaaat 60
ccacacctgc ataagaattt gagcccagtt cataaagcag atcatgaagc aattatcttc 120
ctggaagggt ttttagcttg ctctccagtt gcctcagcag ctttggtctc gtgccacagt 180

gagcccaagg ggaaggtgat ggaacagcat cacatctgca ggctcagtgt tttgtttggt 240
gagggtaagg ggagggaatg tagacggatg aagaaatttc tccctactgc ttccattttg 300
atatttcttt aacttcacat ttcattcctca ttcctagcag ttgcctagtt atagaggatt 360
tcttttawct ttttttcaga ggcatgccag gtggaagtga ggtgcttgst ggsctacaac 420
tccagtgtct gcaattccaa aatgnccctt ggatggaggg ttggtgagaa tgtcaccaca 480
gtgggaaacc agcaatcggg ggaaccattc ccttaagcaa gcctttnaaa gttnttttaa 540
tgccc 545

<210> 138

<211> 396

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (373)

<223> n equals a,t,g, or c

<400> 138

tcctcgggga gcccagttgt gcccaccatt ctctgtaagg tggctcccagg gtgggcttag 60
gagcctataa tagtggccag tgccagagga ggctccctca agaaagccag agttgagatc 120
tgaggaggga gagggagtta gccagaccag ggtggagatg aggggtattct gagcagcagg 180
acctgcaggg gcacaaggca agggccgcct cctagaggag acccagtggc caggcacatc 240
atgggaactg caggctggcc ccaagcctct gccccgctcc tcccttgtag gcagggcctc 300
ctggagcctt gtgctcatcc tgggctcttg aggnccagc cctgcacaga gagcgagac 360
gtgccttgcc ttncacccg tccgctctgt cctctt 396

<210> 139

<211> 2771

<212> DNA

<213> Homo sapiens

<400> 139

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gcttttagtgc tgtctccgct tttctttcac cttcacagag atgtcttatg gtgaaattga 120
aggtaaattc ttgggacctg gagaagaagt aacgagttag ccacgctgta aaaaattgaa 180
gtcaaccaca gagtcgtatg tttttcacia tcatagtaat gctgattttc acagaatcca 240
agagaaaact ggaaatgatt gggctccctgt gaccatcatt gatgtcagag gacatagtta 300
tttgcaggag aacaaaatca aaactacaga tttgcataga cctttgcatg atgagatgcc 360
tggtaataga ccagatgtta ttgaatccat tgattcacag gttttacagg aagcacgtcc 420
tccattagta tccgcagacg atgagatata tagcacaagt aaagcattta taggacccat 480
ttacaaacc cctgagaaaa agaaacgtaa tgaaggaggg aatgaggcac atgttctaaa 540
tggtataaat gacagaggag gacaaaaaga gaaacagaaa tttaactctg aaaaatcaga 600
gattgacaat gaattattcc agttttacaa agaaattgaa gagcttgaaa aggaaaaaga 660
tggttttgag aacagttgta aagaatctga accttctcag gaacaatttg ttccatttta 720
tgagggtcat aataatggtc tcttaaaacc tgatgaagaa aagaaagatc ttagtaataa 780

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agctatgcc a tcacattgtg attatcagca gaacttgggg aatgagccag acaaatatcc 840
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tcattttaa ac attcagagat tcagtgggcc accaaatcca ccatcaaata ttttccaagc 1020
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cttgtaatgc atacatagtt atcatcctcc ttctcaaccc atctccctaa ccccatatgc 2520
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ggatttgtac tatagaatat cttctagtag taatttttct gtagagcaaa ttatatttct 2700
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aaaaaaaaa a 2771
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<210> 140

<211> 422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (329)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (422)

<223> n equals a,t,g, or c

<400> 140

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tgaaataaagg gtgataataa aggtcccggg cttgctcact catggtcaca gtaaaatttt 120
tatgcaagta tataccacct tacataaacc tcactttaga taccctcaag tgattgcaca 180
tcaagatctt gcaaattgaa aaatacatta agtatgccat ggggttgact ttttatcaga 240
attcacacat gatttctttc ataagttcag gatcttttag ggtgcccata gccttgcccta 300
tatttacgta ttttataaac ctacatttng gkatawgaag tcttttcytc tttttttgag 360
acgagtatcg ctctgtcgcc caggctggag tncagtggca ggatcttggc ccactgcaag 420
cn 422
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<210> 141

<211> 1630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<400> 141

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tggggggccg agacagactt cgcccagggtg acgggtagta ggggcggcgc gcttggcctc 120
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atgggggaat ttaaaaacca ttcttgtatc agaagggtgaa ttaggcgcac ggtcttttgtt 1560
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<210> 142

<211> 264

<212> DNA

<213> Homo sapiens

<400> 142

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tgaagacaat cctggaagag cttgttcaga ggggtcatga ggtgactgtg gtwracatcy 180
tcggcttcta ctctgttcaa tgccagtaaa tcattctgcta ttaaattaga agtttatcct 240
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<210> 143

<211> 636

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (260)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (323)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<400> 143

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gccgggagct ggcgcggtttt ctttactatc acgttaccgc tgaccttacc gggaattatt 180
gttggtacgg tactggcttt tgctcgttct ctgggtgagt ttggtgcaca tcacctttgt 240
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catgctggaa ctgaattttt cccagacggt gggcaacccat tgcctgacta ttaatgaaan 480
taccgtactt caatccataa agttgcgtta agccgcacgg ttcaaaacgg ctgggcacca 540
gaatgacgtc cgcgcgcgcc ataatgcgat gcgaawatgc tcgtgatagc caatctgaac 600
gccacactga ccggggtatt tccgtgccgc cgcaag 636

<210> 144

<211> 500

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 144

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gacaaggatg tgtaccctga gccccgcgc cgcacgcggg tgcagcccaa tcccatcgtc 180
tacatgatga aagcgttcga cctcatcgtg gaccgacccg tgaccctcgt gagagaattt 240
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ccagacatca ctgagtgcaa ggaggaggac atcatgtgca tcaaaktcga ccaagaaatt 360
atcacattat gcaggatcgg ytcaaagcyt ktcagcagag ggaaggacag actaccagca 420
gactgtatca aggaaktgga gcagttaccc aggtggccaa ggctaccagg gaccgntatc 480
aggacctgng ggcctacatg 500

<210> 145

<211> 1945

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1934)

<223> n equals a,t,g, or c

<400> 145

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tgtaaatgtg tcatgtaatt tttactttgt acaaagcaaa taaagatctt tctcaaaata 1860
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ttactgcggt ccgnaagggt aattc 1945
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<210> 146

<211> 1114

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1034)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1055)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1084)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1108)

<223> n equals a,t,g, or c

<400> 146

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taccactgga cccttcccct gtcttgaacc ctgagccggc accatgcacg gacgcctgaa 180
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gcanaaattg ggctggggca aggtggnntg gaaa 1114
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<210> 147

<211> 546

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (486)

<223> n equals a,t,g, or c

<400> 147

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tgccgctccc gccttcgcag ccagcgcggg cttacctagt gttaagtctc tcttcttggg 120
tggcccacgc ctaagcgacc tatgcttctt gttcttctga aatcttacag ttcccccttag 180
atgtaggttg gctatttgta gcttccgatt cagataagtt tggaaacttga cagatgtttt 240
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gagataaagg gcaccraaga ccagcttggt tgctcctatc aaggtgatcc tttccagagc 420
aagagccata tgnatgtcta gtcgcacgag tttgtgccaa gtcctttgca aaaaccttca 480
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gatgtnggat ctcatgtaat cttgaagaca tcttagtcgt cctaagggtt aattatttaa 540
ttgatg 546

<210> 148

<211> 1763

<212> DNA

<213> Homo sapiens

<400> 148

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cgacagctgc tctgggtact gtttccgggt cagggtgacc tctggggtga ggaaactgcg 180
actgggagcg ggacccaggc gtgcagcatt cgccatgctc cgctcacgcg tgggagactg 240
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agacagatgt tgaagagtgg acttcctggg atgaagatgc acccaccagt gtaaagatcg 720
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attttaagga catgacacca actattagga aaactcagaa aattgttatt aagaagagag 840
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ttggtgttga catacattcc ctctaatttg aactgggtatt gtttacgtt gataacaacat 1680
taagggaattt gatgattttt atttcatgaa aatgacatta aatgcaataa ttttacttat 1740
cataaaaaaa aaaaaaaaaa aaa 1763

<210> 149

<211> 371

<212> DNA

<213> Homo sapiens

<400> 149

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ctagtctctg tttaatggta aaaggagact ttgccataat tttcagatga agatgtttcc 180
caaacactgt ttacagaatg agatgtgact ctacagatac ctcatagaag acaatccaag 240
atcatacttc attaaactga cagagtacgt gtcttaaagg aagcatcagg aattccaata 300

tttgcmttta aaataactttt twagggcctt ttatattagg ccatgcttg aaactggat 360
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<210> 150

<211> 432

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (379)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<400> 150

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ggcgcccggc ctgcgcacgg gaacctggac tggaacccta cttgcaggtc cccaacttgc 120
gtctctyctc tctgtctcta cccagccaa ggacaaagac ttctcctccg gaaggcctcc 180
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cccggaagga caattttgnt gggccaataa atggggtttt gaaatttntt gttggatttg 420
ntgaatgggc tt 432

<210> 151

<211> 401

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (234)

<223> n equals a,t,g, or c

<400> 151

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cttgacctt gatggaaatg agagcscatt ggccctattg atgtctaacg gcagwacgaa 120

aaggggtgaag agtttatcca aatctcggcg aaccaagata gcaaagaagg tagacaaggc 180
taggctgatg gcagaacagg tgatggaaga cgartttgac ttggrrtcag atgntgagct 240
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ccggaaattg ccccggtgca accttgctct gacccaacc gagttcgtga accaggagaa 360
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<210> 152

<211> 851

<212> DNA

<213> Homo sapiens

<400> 152

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catacctata tcagacttaa tccttaaaag aagattaatt catggaggac agatgttaaa 120
tggattggca ggtccaactg taatgaatgc agcaccattt ctctctacga cgtgggtttc 180
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gcgtgcctat a 851

<210> 153

<211> 1678

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1663)

<223> n equals a,t,g, or c

<400> 153

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cacgctgtcc tgggggcact gggaagccta gataaggccg tgagcagaaa gaaggggagg 1500
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gaggtttgtt caggtccccc aaaccaccgt cagatttgat gatttcctag caggacttac 1620
agaaataaag agctatcatg ctgtggttaa aaaaaaaaaa aanaaaaaga agtcgacc 1678

<210> 154

<211> 1158

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (449)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1138)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1148)

<223> n equals a,t,g, or c

<400> 154

ctttatggtg aaagccttac ggagatgtct gtgagtagca tatcttctgc aggtctttct 60
gtggcctctg ctgtcccctc agcacgacct cgccaccaga agtccatgtc cacttctggt 120
catcctatta aagtcacact gccaaccatt aaagacggct ctgaagctta ccggcctggt 180
acaaccacaga gagtgcctgc tgcttcccca tctgctcaca gtattagtac tgcgactcca 240
gaccggacct gttttcccg agggagctca agccgaagca ctttccatgg tgaacagctc 300
cgggagcgac gcagcgttgc ttataatggg ccacctgctt caccatccca tgaaacgggt 360
gcatttgcaa tgccagaagg ggaacgtcaa ctggtataat aagcaaaatc acatccaaat 420
ttgttcgcag ggatccaagt gaaggcganc agntggcaga accgacacct caagaagtac 480

```
atcaggggaa ccaaaagaaa gagacaagga agaggggtaaa gattctaagc cgcgttcttt 540
gcgggttcaca tggagtatga agaccactag ttcaatggac cctaatagaca tgatgagaga 600
aatccgaaaa gtgttagatg caaataactg tgattatgag caaaaagaga gatttttgct 660
tttctgtgtc catggagacg ctagacagga tagcctcgtg cagtgggaga tggaagtctg 720
caagttgccca cgactgtcac ttaatggggg tgcgttcaag cgaatatctg ggacatctat 780
tgcctttaag aacattgcat caaaaatagc aaatgagctt aagctgtaaa gaagtcctaaa 840
tttacagggt caggggaagat acatacatat atgaggtaca gtttttgaat gtactggtaa 900
tgcctaattg ggtctgcctg tgaatctccc catgtagaat ttgcccttaa tgcaataagg 960
ttatacatag ttatgaactg taaaattaaa gtcagtatga actataataa atatctgtag 1020
cttaaaaagt aggttcacat gtacaggtaa gtatattgtg tatttctgtt cattttctgt 1080
tcatagagtt gtataataaa acatgattgc ttaaaaaaaa aaaaaaaaaa aaaaattnct 1140
gcggccgnca agggaatt 1158
```

<210> 155

<211> 1969

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 155

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gccgcacgag cagccagaga cagcgcgacc cggagccgga gccagagcca gagccagagg 60
gaggacgcag ccgcgccggg gcgcagaacg accagctgag caccggggccc cgcgccgcgc 120
cggaggaggc cgagacgctg gcagagaccg agccaggtaa gcggcgaggc cggggaaggg 180
gggcagccca aggcggaccc ccagagctcg ggggtgcaggg acgcggggct ccgcggcgac 240
aggcagaggg accttcccgc ctccgcagcc acgcgcgcgc ccccggaatg aaccctgagc 300
cccagcgtca ggcgcgcgca ggattctgac accgcaggat tcgcccgggt ccgtgccttc 360
cgttccctgg ggctcagaag ccggcgcgac tgcagcgcca ccgccttcca ccgtcccagg 420
agcggatccc gcccgcgcgc acccgcgacg ggcgccagcc ccccggtagt tatgagaant 480
aataataact tattaacagt gacaaagcag ggggtgacca gcaaagcctc cgtgtgcttc 540
ccaatcccgt gggcagtaaa gcggtatatt cgggggttccc tccggtgtcc aggagagaga 600
gtccacttat tttctttcct gtcacttctg atgaggcgac cgaacgcctc gtttagcgaa 660
gagggaatta aagcccagaa tgagcctgcc tctgcgtctc cagtggcaca agccctctct 720
tgcccacctg gatcctaaca ccggatgtct tttggtctgg ccttcccggg tatcttgctc 780
cacggcattt tccctgcctc cctctcccgc ctctcctcag cacacagatc cagaatcccc 840
atataattct actagacagt agggagaaaag ttcaaccacg aaacgtctct aactttgggt 900
tcttgatgat tcttagcaaa tgaatgcgta ataaacatat ttactcactc ttactccgg 960
agagctcctt agtcatgtga aaaaagtga atgtatccac gatgacagtg ggctgtttgt 1020
tactcacta aagagataag ggtggattga attctgttct ctccctgct aacatgtaac 1080
ttttgtcttc ccatccctcc ttcccactc tcctttccag aaaggcactt ggggtcttat 1140
ctgttggaact ctgaaaacac ttcaggcgcc cttccaaggc ttcccaaacc ccctaagcag 1200
ccgcagaagc gctcccagac tgccttctcc cactcagc tgatcgagtt ggagaggaag 1260
ttcagccatc agaagtacct gtcggcccct gaacggggcc acctggccaa gaacctcaag 1320
ctcacggaga cccaagtga gatattggtc cagaacagac gctataagac taagcgaaag 1380
cagctctcct cggagctggg agacttgag aagcactcct ctttgccggc cctgaaagag 1440
aggccttctc ccgggcctcc ctggtctccg tgtataacag ctatccttac taccataacc 1500
tgtactgcgt gggcagtgga gccagcctt tkggtaatgc cagctcaggt gacaaccatt 1560
atgatcaaaa actgccttcc ccagggtgtc tctatgaaaa gcacaagggg ccaaggctcag 1620
```

ggagcaagag tgtgcacacc aamgctattg gagatttgcg tggaaakctc agattcttca 1680
ctgggtgagac aatgaaacaa cagagacagt gaaagtttta atacctaagt cattcctcca 1740
gtgcatactg taggtcattt tttttggttc tggctacctg tttgaagggg agagagggaa 1800
aatcaagtgg tattttccag cactttgtat gattttggat gagttgtaca cccaaggatt 1860
ctgttatgca actccatcct cctgtgtcac tgaatatcaa ctctgaaaga gcaaacctaa 1920
caggagaaag gacaaccagg atgaggatgt caccaactga attaaactc 1969

<210> 156

<211> 400

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (366)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (398)

<223> n equals a,t,g, or c

<400> 156

aattcggcac gagaagaaag aaagaatgaa agaaagaaaa gaaaagaaag aaaggaaaga 60
aaaaggaaag aaagaaaggga aagaaaggaa agaaagaaag agagagaaag aaagaaggaa 120
aaggaggaag ggaattccag gtatatacca ctgcatgagt aaaggcaggg ttgtggatag 180
acatagttga tttgtagggc ccttgtttgc caagaatagt cctgctttac ccctgttgtc 240
ctgatgtaat tattaataat actgcctcat tcagtcctaa ataagtcttg grtttggact 300
agaaattata tggctaccyc tttatgtggg actaaaagta attccttgrg acmgggacnt 360
ggagtnaggt gccaaggaa agctagaagg tagttttntc 400

<210> 157

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 157

catggtttgg taacctcatg cactgtggga atgtcagagg accccgagat aatgcttcac 60
tgccaagtct gaaaattgtg tccacaagat ttgattggtg gtattttcta tcattgtaca 120
acttaaaata tcttctaatt tccatttttt ttttttgaca tgagttgtat agaaatgtgt 180
gcttcagttt ctgttatagc aacaactctt gtcacccata gccttacaaa aattcctaata 240

```
tttaatat ttt aaat ttt taga attckacrag cagaattaca aaaagagtaa ctaacaagaa 300
agt gagattg tgatgggata acggaatgtc aagtctaatt gtcaggaaaa gacaaaataa 360
catgggaatg acaatcaaaa tggactaagg acttagaaga tccgaaacta tgaagctact 420
aaaagaaaca ttggggaatg ctccaggaca ttggtctggg caaagatttc ttgagcaata 480
ccttaaaagg acaggcaacc caagcaaaaa tggrcagwtg ggwtcmcwtc magctaaaaa 540
acttctacac agcgaaggaa acaaagtga cagaataaca tgggaatgtt ttctgtaatt 600
tagtagtaac tggcaatagt ttacaaacac attttgtgta tactgctgtc attgcactga 660
ttaccttctg ttgtagtgac tttgttctat tagtccactc aattaaaata tttgggttttn 720
tt 722
```

<210> 158

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<400> 158

```
taatattcct ttggattcag agaccacaaa ctaccagatt gtcaatcatg accaaaagtt 60
gcttctcatc acttctacaa cccacaaatg gaaaaagaac cgagtgcagag tgtatgagta 120
tgatactagg gaagatcagt ggattaatat aggtaccatg ttaggccttt tgcagtttga 180
ctctggcttt atttgccttt gtgctcgtgt ttatccttcc tgccttgaac ctggtcagag 240
ttttattact gaggaagatg atgcacggag tagntctagt actgaatggg acttagatgg 300
attcagtgag ctggactctg agtcagggaag ttcaagttct ttttcagatg atgaagtctg 360
ggtgcaagta gcacctcagc gaaatgcaca ggatcagcag ggttctttgt aaatagtatt 420
ttgagacact aagatgtttc tactgctacg gratgtattt taaacacata tcgtttcttt 480
ttcttgga aaagttgat taggaccaca gatttggttt agaaagggta atattttgaa 540
atactacaag gtttagacag tccatgaatc gacctgttta ataatttacc atcctgaaag 600
tccagaatta aaatatggaa gcaagaacta tataattgat taggatgctt ggtaggtttt 660
tttcattggt caaatattca ttgcacagtg gattgttttg attagttagt atgctttttt 720
tttaattaat tcagtcttct gttaattttt aagttttggt tagtgccaca aggaatttaa 780
ctttttgatt tgtataatag aaaactgaac taggaattgt tagcgggggt ttgaaggatg 840
tgtactttcc ttcaaaaataa agtggttagt tttcaaaatt ttacactagt cagttcttta 900
tattctaagt taaatgtagt ttgtaaaatt attttggttt tcttctacaa aggaaaaaat 960
tggatttata tatataaggt tactgcataa tgatttcatt ttgataatgt gcagaatggc 1020
ctcataagct cacagaaagt aaaaaaaaaa aaaaaaaaaa aagaaaaaat caggattcca 1080
ctgtttttaa agaaatctca gtttttattt tggaatataa aatgtgtatt tggtatatgt 1140
gaccaatttt ctatcccaaa aaacacccat tcttagtaat gtcatgaatt aaacaccctt 1200
```

<210> 159

<211> 345

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (321)

<223> n equals a,t,g, or c

<400> 159

```
ttcggcacga gagaaaagta aaaaaaagaa agaaagaaag aaacaaacaa aaaaaacaac 60
tggcatacat atatctccta aatacaggaa gaagtattca taatctcact ctttagcatg 120
gtacaaagct aaccacaact aawttattgt atataargcc acgtgaagtg stgtgtgaca 180
gccttatttt gtgaataggg ctgagaaaac cagttcaaat tctcctgaga ctatttcaga 240
ggrgttaaaa tttgaactcg tttaaaaaatc atgrttttatt tacttaatat taagtttagg 300
ttaacgggca gaaaangagg ngcctggggg catcacccaa atttt 345
```

<210> 160

<211> 476

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (312)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (421)

<223> n equals a,t,g, or c

<400> 160

```
aattcggcac gagagacacc agagtgaagg agagaggcca tgctgtgtcc gagaagctcc 60
tactggggtg gaagggacag ctccacaaag gctgctcttg caggggctct cctgcagcaa 120
ggtgcctgct gactgtcccc agactgtctc ccgacacaga gggatgcaaa ggcagcctct 180
tcctgctcag tgggaataggg aaattatata acctttcact tcccactctc acttctgccc 240
ctgctaccct tagtcttttg cttttgctga cttttcccc tcttatcttt tctcctgacc 300
aagttctagg tntttcatag ggcagtctta ggtgagggtt ggaaccccaa tgaagttggg 360
caacagaaac ccagctnaca atggctgttc actgtgggca agctgtttcc ccttcattct 420
ntaaaagtgg aggtgggggtt agtgtatgag tctgggtttc cattcaactg tgtgtg 476
```

<210> 161

<211> 520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (520)

<223> n equals a,t,g, or c

<400> 161

```
aattcggcac gagctgcgcg cggctacagc acggttcggt tttccttttag tcaggaagga 60
cggttggtggt gaggttagca tacgtatcaa ggacagtaac taccatggct cccgaagttt 120
tgccaaaacc tcggatgcgt ggccttctgg ccaggcgtct gcgaaatcat atggctgtag 180
cattcgtgct atccctgggg gttgcagctt tgtataagtt tcgtgtggct gatcaaagaa 240
agaaggcata cgcagatttc tacagaaact acgatgtcat gaaagatttt gaggagatga 300
ggaaggctgg tatctttcag agtgtaaaagt aatccttgga tataaagaat ttcttcaggt 360
tgaattacct agaagtttgt cactgacttg tgttcctgaa ctatgacaca tgaatatgtg 420
ggctaagaaa tagttcctct tgataaataa acaattaaca aataaaaaaa aaaaaaaagg 480
ggggggcccc tctaaaagggt ccaagcttac gnacgggtgn 520
```

<210> 162

<211> 339

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (109)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (334)

<223> n equals a,t,g, or c

<400> 162

```
aattcggcac gagcgcgcct ccacgcccag ctaatttttg tatttttggt agagacgggg 60
tttcttcacg ttggctaggc tgatcttgaa ctcctgacct caagtggtn gctgcctca 120
tcctcccaaa gtgctgggat tacaggcgtg acacctgcac ccacccatgc tctagtacat 180
cctaaagaat gccttttagtt cctctttcct gacattactc tgcttaaatt cccagattc 240
aagctttttg agaatcctat ctcagcattt tgggcatcag gccatgttat atataggtrc 300
acaacttcta ggccttgttt agttggacag gttnaaaag 339
```

<210> 163

<211> 357

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (343)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<400> 163

```
aattcggcag agcagaacat tggatatgagg cacatgactg tagatcttct cattaataat 60
aggcaacctg gtcagggtgca cgartctagg gttcagaatc caacaggctc aaattcaagt 120
ccagctcagc cacgtggctg atgctgtctg aacctcagcg tcctcagctg ttaaacagag 180
gtaaccatcc ccatctcagc agctttggga ggaaattaaa tgagatatat tggggatcca 240
gataaccaat aaaatatcaa atcactttac cagttcaagc tcttaccact tcagtattg 300
catgggcttt atcactgacg gatggaactc aggggttcca ggngttcgng acccagc 357
```

<210> 164

<211> 1079

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (303)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (993)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1058)

<223> n equals a,t,g, or c

<400> 164

```
ggcacgagct tggcctccag agtgctggga ttacagggtg gagctaccgc gcccggecta 60
ttatcttgta ctttctaact gagccctcta ttttctttat ttttaataata tttctcccca 120
cttgagaatc acttgtagt tcttgtagg aattcagttg ggcaatgata acttttatgg 180
gcaaaaacat tctattatag tgaacaaatg aarataacag cgtattttca atattttctt 240
attccttaaa ttccactctt ttaacactat gcttaaccac ttaatgtgat gaaatattcc 300
tanaagttaa atgactatta aagcatatat tgttgcatgt atatattaag tagccgatac 360
tctaaatara rataccactg ttacagataa atggggcctt taaaaaatatg aaaaacaaac 420
ttgtgaaaat gtataaaaaga tgcactgtgt gtttcaaatg gcactrtctt yttttcagta 480
ctacaaaaac agaataattt tgaagtttta gaataaatgt aatatattta ctataattct 540
aaatgtttta atgcttttct aaaaatgcaa aactatgatg tytagttgct ttattttacc 600
tctatgtgat tatttttctt aattgttatt ttttataatc attatttttc tgaaccattc 660
```

ttctggcctc agaagtagga ctgaattcta ctattgctag gtgtgagaaa gtggtggtga 720
gaaccttaga gcagtggaga ttgctacct ggtctgtgtt ttgagaagtg ccccttagaa 780
agttaaaaga atgtagaaaa gatactcagt cttaatccta tgcaaaaaaa naaaatcaag 840
taattgtttt cctatgrgga aaataaccat gagctgtatc atgctactta gcttttatgt 900
aaatatttct tatgkctcct ctattaagrg tatttactaa aactctgtaa tctccaaaat 960
attgctatca aattacacac catgttttct atnattctca tagatctgcc ttataaacat 1020
ttaaataaaa agtactattt aatgatttaa aaaaaanaa aaaaaagaaa aaaaaaaaa 1079

<210> 165

<211> 1325

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1302)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1313)

<223> n equals a,t,g, or c

<400> 165

ttaaaacaag atacatacat agtataacac acctcacagt gttaagattt atattgtgaa 60
atgagacacc ctaccttcaa ttgttcatca gtgggtaaaa caaattctga tgtacattca 120
ggacaaatga ttagccctaa atgaaactgt aataatttca gtggaaactc aatctgtttt 180
tacctttaa cagtgaattt tacatgaatg aatgggttct tcactttttt tttagtatga 240
gaaaattata cagtgtctaa ttttcagaga ttctttccat atgttactaa aaaatgtttt 300
gttcagccta acatactgag ttttttttaa ctttctaaat tattgaattt ccatcatgca 360
ttcatccaaa attaaggcag actgtttgga ttcttccagt ggccagatga gctaaattaa 420
atcacaaaag cagatgcttt tgtatgatct ccaaattgcc aactttaagg aaatattctc 480
ttgaaattgt ctttaaagat cttttgcagc tttgcagata cccagactga gctggaactg 540
gaatttgtct tcctattgac tctacttctt taaaagcggc tgcccattac attcctcagc 600
tgtccttgca gttaggtgta catgtgactg agtgttggcc agtgagatga agtctcctca 660
aaggaaggca gcatgtgtcc tttttcatcc cttcatcttg ctgctgggat tgtggatata 720
acaggagccc tggcagctgt ctccagagga tcaaagccac acccaaagag taaggcagat 780
tagagaccag aaagaccttg actacttccc tacttccact gctttttcct gcattkaagc 840
cattgtaaat ctgggtgtgt tacatgaagt gaaaattaat tctttctgcc cttcagttct 900
ttatcctgat accatttaac actgtctgaa ttaactagac tgcaataatt ctttcttttg 960
aaagctttta aaggataatg tgcaattcac attaaaattg attttccatt gtcaattagt 1020
tatactcatt ttcctgcctt gatctttcat tagatatatt gtatctgctt ggaatatatt 1080
atcttctttt taactgtgta attggtaatt actaaaactc tgtaatctcc aaaatattgc 1140
tatcaaatta cacaccatgt tttctatcat tctcatagat ctgccttata aacattttaa 1200
taaaaagtac tatttaatga ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1260
aaaaaaaaag gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa angggggggg ggnccaaaaa 1320
aaaaa 1325

<210> 166

<211> 394

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<400> 166

```
aattcggcac gagtttgcac ccaaattgtt tgacctttgt gcagtggctc ccattatcaa 60
ctggggaacc agtacaatct ttacctagtt actactgagg ttgttctctc tccatcacia 120
aatttcatgc tatttatctg tgagaaaatg cctgaggact ttcacacagt aattcatctt 180
atctggaacc cttaggatca gatgtagacc gagcaaatgt caagttcaca gagaacacct 240
gtgtcttcag aacattaaag ggcaccatta gagcttggtt cccttcactt tacatgcaca 300
tttttggsat aagttngggg ctkratgatg ttgtcatags naatactgct agratgrttg 360
ctgtactcat tcactncaa aaaagggggg gntg 394
```

<210> 167

<211> 517

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (400)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (401)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<400> 167

```
ataattgCGG ctctttctcc tattcagatt ttacccagtg atggaaaaga tcaattttct 60
tgtggaaatt cagtggctga ccaagccttc cttgattctc tctcagccag cacagctcag 120
gncagttcgt cggtgccag caacaatcac caggtacgtc tcaactcctc cttctggatg 180
tggctggcct tacggaaaac agagcgtatt tgtgnaaggc ttgtgatgca ttatagctat 240
tgccattccc caaaagcaaa aacaaagtcg ctttaggttg ttctgtggca tttctggttg 300
gtactaacia agaaatcacc tgttwagcct gataatgact gtttgcaaat ttattataag 360
agaaaaggca gggatttgag ggttgctttt aggaagtctn nccatgatat ggaacacaga 420
ccccagaaac ttgcaaatac cctcttaggt taaggcatgg aaagaggagg angagagagg 480
tcttgtttgt tgaggaggtc catgtcaggc cttggcc 517
```

<210> 168

<211> 341

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (335)

<223> n equals a,t,g, or c

<400> 168

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cttccctcag cccttgcca acagcattct actttctgtc tctacggatt tracacttta 60
gtagcctcat gtaggaagaa tcataatact tgtytttttg tgactggcct atttcactta 120
gcataatatt ttcaatgttc atccattttg aagctccatg tgagtgggca ggaacttggt 180
aactggaggc cttcactgag aagtgattaa ggtgatgaat acctgccagt gcagtggcct 240
cacacctgta ctccagcact ttggggaggc caaggcagga agatcatttg agccccagga 300
tttsgggacc accttkggca atatagtgag acccngtggt t 341
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<210> 169

<211> 350

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (293)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (305)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (311)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (314)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (338)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (343)
<223> n equals a,t,g, or c

<400> 169
ttcggcacga ggtcttgact cctaccccc tacaacacat ataaaatcag ttccagatag 60
atcacacatc taaatgtgaa atgcaaaata ataaagcttt aagaaaaaaa gtaatggaac 120
catcttcattg atcttagagt aagtagagat ttattaagta ggatattaaa ggaacactat 180
aaatttaggg aaaaaatcaa tatattgatt atattaaaat taaggaactt ttcctcatta 240
agaggccaca aagtatttgt agtatacaca tccaacaaaa gttccatatt ccngaattwtw 300
tggaaggaaat nccnatggta cgttaaaaaa aggccagncc cangggggggg 350

<210> 170
<211> 441
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (111)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (143)
<223> n equals a,t,g, or c

<400> 170
aattcggcac gagacatggt gaacctgggtc tctacataaa atacaaaaaac ttagatgggc 60
atggtggtgt gtgcctatag tcccactact tgtgggggcta aggcaggagg ntcacttgag 120
ccccggaggt cgaggctaca gtnagccaag agtgcactac tgtactccag ccagggcaag 180
agagcgagac cctgtctcaa taaataaata aataaataaa taaataaata aataaataaa 240

taaaaaaaaa caaagttgat taagaaagga agtataggcc aggcacagtg gctcacacct 300
gtaatccttg ctttttgga ggctgaggca ggaggatcac tttaggcctg gtgtgttcaa 360
gaccagcctg gtcaacatag tgagacaytg tytytaccaa aaaaaggaag gaaggacac 420
atatcaaact gaaacaaat t 441

<210> 171

<211> 403

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (401)

<223> n equals a,t,g, or c

<400> 171

ttttcatgaa cctcttcctt gggaaacctt atgactcaac agtcaaaggt gtccgaatag 60
taaagatggt tttcagtgat caggtctgtg cccatgcctg gccttgata gactctgaaa 120
tgagattcct tgtttgattg atggggatgt ggtttctgtt gtgtacattt gaaggaaacc 180
agtttcccca cccaaaattt ctaaggagtt taatcttttg ggtrtagggg agttaaacta 240
cactgagtca aggaagtaat tgattgcata tttcctctaa aagtcagcta tggrrttgata 300
ttgactaaaa caaactagca gttctcttcc accaccaagt cmgagcgtct gttcaccatt 360
ctgcatgggt aaaagracc acttagggat gggtaatgnt ncc 403

<210> 172

<211> 984

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<400> 172

caagatatatt acttccgctc caaacaaaga tgggccagct aacgagcncg ggggaaacat 60
ccgcccggaa ggccacttga aggcacttcc gccctctctt aacatggagc cggcggaagg 120
ggtggtgtag ggccggggcga taatggcggc gtcgaggctg gagctaaacc tggcgcggt 180
gctatmccgc tgcgaggcga tggcagcgga gaaacgggac ccggacgagt ggcgcctgga 240
gaagtacgtg ggagccctag aggacatgtt gcaggccctg aaggtccacg cgagcaaacc 300
ggcctctgag gtgatcaatg aatattcctg gaaggtggat tttctgaagg ggatgctgca 360
agccgagaag ctgacctcct cctcagagaa agcactggcc aaccagttcc tggcccctgg 420
ccgtgtgcca accacagcca gagagcgagt gcccgccaca aagacggtgc atctgcagtc 480
acgggcgcgg tacaccagcg agatgcgag tgagctacta ggcacggact ctgcagagcc 540
tgaratggac gtaaggaaga gaactggagt ggcagggtcc cagccagtga gtgagaagca 600
gtcggcagct gagctagacc tcgtcctgca gcgacatcag aacctccagg aaaagctggc 660


```
ggaagagatg ctaggactgg cccggagcct caagaccaat accctggccg cccagagtgt 720
catcaagaag gacaaccaga ccctgtcaca ctcaactgaaa atggcggacc agaacctgga 780
gaaactgaag acggagtcag agcgtctgga gcagcacacg cagaagtcag tcaactggct 840
gctctgggcc atgctcatta tcgtctgctt catcttcatt agcatgatcc tcttcattcg 900
aatcatgcct aaactcaaata aaagaccccc gcccaaaaaa aaaaaaaaaa aaaaaaaaaa 960
aaaaaaaaa aaaaaaaaaa aaaa                                     984
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<210> 173

<211> 1194

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (16)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (110)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1192)

<223> n equals a,t,g, or c

<400> 173

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cgngggcggn  anntantggc  cccccctaa  agggaacaaa  agctggagct  ccaccgcggt  60
ggcgggccgct  ctagaactag  tggatcccc  gggctgcagg  caaaagggan  aattcaaaat  120
ttagaaaaaa  cattagaaat  gttaatatg  gatatttttg  acttaagaca  ttcagaaaag  180
ttaatgtttt  aacacgatat  gtgattatag  aattctattc  atatatgtgt  tcacatttat  240
acactttgct  atactttgta  tttataaata  taattctgtt  agataaataa  gtgattcata  300
ttttgtcaaa  actattttta  aatttcaata  tttaaaatat  ttttgaatca  ctgggtttcg  360
ttaagtggca  tcatagrtga  gatttgattc  catgtagcat  ataattttag  attgttcctc  420
tctcacccct  tttaaactcc  ttcaagcatt  gctattactg  gggttgcctt  tgggaaaact  480
tacttctaga  tactaccata  tatctgaaat  agtagagggt  gatgttaata  aaattcataa  540
aataatcatg  tattactttt  tttgatttac  cactggaagg  aaatacagtc  atgtgcaata  600
taatgacgtt  ttggtcattg  agaccacat  gtgtgacagt  ggtcccataa  ggatgttgct  660
gaaaaattcc  tgttgctgcc  tagtgacact  gtagccatcg  taacgccata  gcacgacacg  720
ttactcacct  gttcatgggt  atgctgggtg  aaacaaacct  gtgctgccag  tcatacaaaa  780
gtatagcaca  atgacaatta  tgtacagttt  atcataattc  ttgataataa  atgactatgt  840
tacaggttta  tgtattgatt  ccactttttg  tcattatttt  ggaatgtact  cctactaatt  900
ataaaaaaga  aaaggttaac  tgtaaaaaag  cctcaggcag  gtccttttag  aggcatcca  960
gaagaagaca  ttgttaccat  aggagatgac  agctctatgt  gtgttattgc  ccctgaagac  1020
cttctagtgg  gacaggatat  ggaggggaaa  gacagtgaca  ttggtgatcc  tgaccctgtg  1080
taggcctagg  ctaatgtgtg  tgtgtcctcg  tttttaacaa  gaaagttaa  aaagtaaaaa  1140
aaaaraaaaa  ggnctcgaga  aagggcacaa  gggcncttgg  gcaaattggc  gnac  1194

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<210> 174

<211> 701

<212> DNA

<213> Homo sapiens

<400> 174

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gcttccactg  atcttgccca  tctgatgtta  ccatgtttgt  tgtaaaggaa  gagactggca  60
ttctggacaa  ctggcatcag  agactggctg  acatggagaa  cccactctgt  gtgtgctgag  120
grcagggcac  tcaccagtgc  agaggcagaa  gtgggtgcct  gtcctcgagg  gttaaccgcg  180
tttgctccc  gccacagcc  cctccacctt  ctaaaagctc  aagagatgat  cagactgaaa  240
caccgcacca  tcttgctgtt  ctgcctaggc  tggaagacct  ggcccagggt  atggaggccc  300
ctgtccact  tgccagattc  gcaggagtct  tctgaccaga  gctgtcgcac  cttgctgctg  360
ccactggcac  tgctgccatt  ctcactctct  tgggggcctt  cattgggtgcc  acattctttg  420
tagccacctg  ggctgtcagc  catgagggaa  ggaccctcgt  tttagtctcg  gattgtaagg  480
tttccatctc  tgtaccttct  cacaaagaag  agtcaggggc  caagcttaat  gacctgtttt  540
ttaattcagg  aaggtaaata  tcgttctctc  gtcacaccgc  gaattacagg  tccatttgct  600
ctcagtggga  gttgatcttt  gattcctaca  aagaacaata  aagtcgggtg  aattcccata  660
aaaaaaaaaa  aaaaaaaact  cggggggggg  ccccgtaac  c  701

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<210> 175

<211> 1181

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (79)

<223> n equals a,t,g, or c

<400> 175

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ccaaagtgtt gtgtgtgtnt gtgtgagtgg gtgcgtggta tacatgtgta catatatgta 120
taatataatat ctacaatata tattatataat atctatatca ttttctgtg gagggttgcc 180
atggtaacca gccacagtac atatgtaatt ctttccatca ccccaacctc tcctttctgt 240
gcattcatgc aagagtttct tgtaagccat cagaagttac ttttaggatg ggggagaggg 300
gcgagaaggg gaaaaatggg aaatagtctg attttaatga aatcaaagt atgtatcatc 360
agttggctac gttttgggtc tatgctaaac tgtgaaaaat cagatgaatt gataaaagag 420
ttccctgcaa ccaattgaaa agtgttctgt gcgtctgttt tgtgtctggt gcagaatatg 480
acaatctacc aactgtccct ttgtttgaag ttggtttagc tttggaaagt tactgtaaat 540
gccttgcttg tatgatcgtc cctggtcacc cgactttgga atttgcacca tcatgtttca 600
gtgaagatgc tgtaaatagg ttcagatttt actgtctatg gatttggggt gttacagtag 660
ccttattcac ctttttaata aaaatacaca tgaaaacaag aaagaaatgg cttttcttac 720
ccagattgtg tacatagagc aatgttggtt ttttataaag tctaagcaag atgttttgta 780
taaaatctga attttgcaat gtatttagct acagcttggt taacggcagt gtcattcccc 840
tttgactgt aatgaggaaa aaatggtata aaagggtgcc aaattgctgc atatttgtgc 900
cgtaattatg taccatgaat atttatttaa aatttcgttg tccaatttgt aagtaacaca 960
gtattatgcc tgagtataa atattttttt ctttctttgt tttattttta tagcctgtca 1020
taggttttaa atctgcttta gtttcacatt gcagttagcc ccagaaaatg aaatccgtga 1080
agtcacattc cacatctgtt tcaaactgaa tttgttctta aaaaaataaa atattttttt 1140
cctatggaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 1181
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<210> 176

<211> 489

<212> DNA

<213> Homo sapiens

<400> 176

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aatcgctgaa ccaggagcgg agttgcagga ggagaytcac cactcacttc agcctgggtga 60
cagrpggagc tctktcttaa aaaaaaaaaa aaaatcatct gtaaaataaa ttccgggata 120
gtcgttttgt tcaaggaaat gttttgtaaa ttgagctcac actatataat ctttattgtc 180
ctatcctgat gtataatata gcaggataaa ttacaccaag cgctatagtt ataaatatgg 240
catgaagtga actatggcct tttatttcct tccagtgtga acacagcagg tgtgagatgt 300
catcttgga gacaggcctt gcagaaatag gcctacatcc aaaatattat cttgtgactc 360
catgaaccaa tcattaaccc tttgtatctt tgagtgaata ttttactcaa aagttgcac 420
```

tggaagttcg aagaaattac ttgaaataaa aataaagatt tctatataga taaaaaaaaa 480
aaaaaaaaa 489

<210> 177

<211> 253

<212> DNA

<213> Homo sapiens

<400> 177

aattcggcac gagccccggw cagggcacaca ggcccaggtg tgtagggccac agcagccgca 60
gtcctgaaag sctgcaacac ccagacctcc aggagagacc aggcccagga tgcctcgcct 120
gttcttggtc cacctgctag aattctgttt actactgaac caattttcca gagcagtcgc 180
ggccaaatgg aaggacgatg tkattaaatt atgcggccgc gaattagttc gsgcgcarat 240
tgccattttg ggg 253

<210> 178

<211> 393

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (214)

<223> n equals a,t,g, or c

<400> 178

aattcggcac gagagcttat tcattgaagg agtaagtggc tgctcactcc tttctgctga 60
aactctttcc tgccttgta gcctagtgtg gaatgggagc agggtcacag tgaaagagct 120
gaatctcccc acccaccac actgcagcag gctgcggctg gccgacttgt taattgccga 180
gcaggaacac agcagcaagc tgcggggacc cctnacttgc tacagttgat ggctgtgtgt 240
ctctcccagg acctagagaa aacccgscct gtgtacgagc gcatcactat cggcacattg 300
ttcatgtcct tcatgaacgr gtaaaactgct gtttccgtgg rttttcaaaa aaaaaaaaaa 360
aaaaaaaaa aaaaaaaaag ctcgagggtg ggc 393

<210> 179

<211> 465

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (377)

<223> n equals a,t,g, or c

<400> 179

attataagcg acgatgggtc tggtgctatg aacacagcag tcggtcacctg tcattgtcca 60
cccaggagtg gccttggtta ttccaagtgg catgtatctt ccctctgagc ttcatctctt 120
caagatgctc tgggtggtgg gatgggagac catcctgcag ccctcctcag acctatcaa 180
ttcattgaga gattgcaaag ctgaaagcac ctccggccac tcctgggaga cagacccttt 240
ggtgatgaaa taaaccagtg acttcagagc ctatggtctc aactgtgctt gaaaaacact 300
gtctctgaaa acaactttgt gattctccct gtcctctgtg gacaaaagca cataattctg 360

ctgttacggg tacttgnstc atacgagctt tcatgttcag catgcaatgg aatcatgctt 420
gtccatgtga aataaatatg gctctctcgt gtccttaaaa aaaaa 465

<210> 180

<211> 532

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (140)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (496)

<223> n equals a,t,g, or c

<400> 180

cttgggttca gggaaaccag agattatacc aagacgggtc attctgcgcc atggaaaaca 60
tccttggnat ttaattgctg ctgacaataa aggtaagggc tgggcttgga tacagcattc 120
cccagataga gatgctagan aaagtgcata gctatggggc gcacagctct gtttgccttc 180
atcattgtaa cccgtagaaa gaaaacttga gtaagggtcaa ggtttccatg ctttccttaa 240
agtgtggagc cttttattcc atgaaaaggc tatacaaaaa tccagggttat caagcaaata 300
aacaagcagt tcttactcag ataaacaaga tacacccctt caccctacct gctcaatttc 360
tctttctcca ctccccaaa cccacctcca ttgtagttcc tgcagggggc cccgtaagyt 420
tattttgaaa atcactaggc tgggctkggc cgcggtggst tcaggatgtw aatyccagca 480
ctttggggcg ggcccnggga aggcagttca ttttggggc aaggggtttt tg 532

<210> 181

<211> 814

<212> DNA

<213> Homo sapiens

<400> 181

aattcggcag agtaaaattc aaataattat aagcatttgg caaaaacaag agaaaagaaa 60
cttgccatat ttacaagct gcaatttttag aaaagcttta acttaatgat agttttatca 120
ttgttttctt gtcccaaact tatccagggc catagaagta tgaatctaata taaaacagaa 180
atgggaatta ttgcacagaa atgggaaata actaatttta aatcagtcaa attggcttct 240
tattaaatac aataattctt atgraaatca tagtacccta ttttcagaca cagctgccag 300
tttacacatt tctcagtatc ctgaarggra aaaagtatag ccccrcttat actatgtaaa 360
attaccaata aaatatTTTT atgactacag attttgcatt tttgtttaca actattttaa 420
gagttttatg ttgtatttag aatttcaacc tagaaaccac acagtactta aattctcctg 480
gggtctcctg ctttctctta accatttgct taatatatat ctacctaaag gagacttctg 540
aattgtaaat gaacttaaaa atagaatgtg gatgcaaaat atcacataag acatcatgat 600
aacatttgaa gaaaaaataa aactgtagac cctaacagtt gtgatatttg gtggkttcat 660

gtggtaatgt aattttctgk ttaattacag tacttttttac aggcacagtg gkactgtctt 720
ttttgtaaga tgcyagttgt gaaatacaat taattgcata cagtaaaagt ctgtgattaa 780
aacatttata tacctcaaaa aaaaaaaaaa aaaa 814

<210> 182

<211> 317

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (315)

<223> n equals a,t,g, or c

<400> 182

taattcggca cgaggaacca ctgttcctta caggtaagcc agcatgatag ttagaccaaa 60
ccatcccaat agagacttgg catgcattca acaaacatcc cagggtgccta ggggtgtgccc 120
agcaccattc caggagctgc cagtaaagga aacaagactg ctgtgtggcc aggtgcgggtg 180
gctcacatct gtaatctcag cactttggga atgccgaagt gagtggatca cctgaggtca 240
ggagttcaag accagcctgg gccaacatgg tgaaacccca ttttttactt aaaaaaaaaa 300
aacttggggg ggggncc 317

<210> 183

<211> 243

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (169)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (181)

<223> n equals a,t,g, or c

<400> 183

tataaaagaa aaaaaaaggc tgtacaaaaa tttcttttrt acagagactg trtaaaagaa 60
aaaaaaaaag aaatacmtgt gttcttaaaa ccatttgtat attttcattt ctagaccaca 120
ctgtagctaa ttattgttat taaatgttaa gataatttaa gtatataana taagtattga 180
nccgggcatg gtggctcacc cctgtaaatc tcagcacttt gggaaggctg aaggcggggg 240
gtt 243

<210> 184

<211> 1148

<212> DNA

<213> Homo sapiens

<400> 184

aattcggcag aggggccata caaaaatttt ggacttgta ataccactta ctaaccgggc 60

ctgtaacact gggctaaaca aagtaagccc tgtttactca gcagtgtttg ggggacatga 120
agattgccta gaaatattac tccggaatgg ctacagccca gacgccagg cgtgccttgt 180
ttttggattc agttctcctg wgtgcatggc ttcccaaagg agtggagctg tragttcttt 240
ggaattgtga acattctttt gaaatatgga gccagataa atgaacttca tttggcatac 300
tgcctgaagt acgagaagtt ttcgatattt cgctactttt tgaggaaagg ttgctcattg 360
ggaccatgga accatatata tgaatttgta aatcatgcaa ttaaagcaca agcaaaatat 420
aaggagtggg tgccacatct tctggttgct ggatttgacc cactgattct actgtgcaat 480
tcttggaattg actcagtcag cattgacacc cttatcttca ctttggaatt tactaattgg 540
aagacacttg caccagctgt tgaaaggatg ctctctgctc gtgcctcaa cgttggaatt 600
ctacagcaac atattgccac tgttccatcc ctgacccatc tttgtcgttt ggaaattcgg 660
tccagtctaa aatcagaacg tctacggtct gacagttata ttagtcagct gccacttccc 720
agaagcctac ataattattt gctctatgaa gacgttctga ggatgtatga agttccagaa 780
ctggcagcta ttcaagatgg ataaatcagt gaaactactt aacacagcta atttttttct 840
ctgaaaaatc atcgagacaa aagagccaca gagtacaagt ttttatgatt ttatagtcaa 900
aagatgatta ttgattgtsa gataggttag gttttggggg gccagtagtt cagtgagaat 960
gtttatgttt acaactagcc ttcccagtaa aaaaaaaaaa aaaaaaaatt gtaaacatca 1020
cttatattac tttattgcag cttcatcacc agtacattat atgttgtaat atttatttac 1080
ctgatcattt tgatcatttt ctgctttatt ttgctaataa actgtgatgt tacttctaaa 1140
aaaaaaaa 1148

<210> 185

<211> 1971

<212> DNA

<213> Homo sapiens

<400> 185

gtactttaac aattcmcart actatagtay tgggaattgt taaaagtaca ttctcttgaa 60
agataagaat cactggcttc tatgcgcttc ttttctctca tcatcatgtt cttttacccc 120
agtttcctta ctttttttta aattgtttca gagtttggtt tttttttagt ttagattgtg 180
aggcaattat taaatcaaaa ttaattcatc caatacccct ttactagaag ttttactaga 240
aaatgtatta ctttttattt tttcttaatc cagttctgca aaaatgacct ataaatttat 300
tcatgtacaa ttttggttac ttgaattggt aaagaaaaca ttgtttttga ctatgggagt 360
caactcaaca tggcagaacc atttttgaga tgatgataca acaggtagtg aaacagctta 420
agaattccaa aaaaaaaaaa aaaaaaaaaa aaaaagcaaa actgggtttg ggctttgctt 480
taggtatcac tggattagaa tgagtttaac attagctaaa actgctttga gttgtttgga 540
tgattaagag attgccattt ttatcttgga agaactagtg gtaaaacatc caagagcact 600
aggattgtga tacagaattt gtgaggtttg gtggatccac gcccctctcc cccactttcc 660
catgatgaaa tatcactaat aaatcctgta tatttagata ttatgctagc catgtaatca 720
gatttattta attgggtggg gcaggtgtgt atttacttta gaaaaaatga aaaagacaag 780
atttatgaga aatatttgaa ggcagtacac tctggccaac tgttaccagt tggattttct 840
acaagttcag aatattttta acctgattta ctagacctgg gaattttcaa catggtctaa 900
ttatttactc aaagacatag atgtgaaaat tttaggcaac cttctaaatc tttttcacca 960
tggatgaaac tataacttaa agaataatac ttagaagggt taattggaaa tcagagtttg 1020
aaataaaaact tggaccactt tgtatacact cttctcactt gacatttttag ctatataata 1080
tgtactttga gtataacatc aagctttaac aaatatatta agacaaaaaa atcacgtcag 1140
taaaatacta aaaggctcat ttttatattt gtttttagatg ttttaaatag ttgcaatgga 1200
ttaaaaatga tgatttaaaa tgttgcttgt aatacagttt tgcttgctaa attctccaca 1260
ttttgtaacc tgttttattt ctttggttgt aaagcgtttt tgcttagtat tgtgatattg 1320
tatatgtttt gtcccagttg tatagtaatg ttccagtcca tcatccagct ttggctgctg 1380
aatcataca gctgtgaaga cttgcctttg tttctgttag actgcttttc agttctgtat 1440
tgagtatctt aagtactgta gaaaagatgt cacttcttcc ttttaaggctg ttttgtaata 1500

```
tatataagga ctggaattgt gtttttaaag aaaagcattc aagtatgaca atatactatc 1560
tgtgttttca ccattcaaag tgctgttttag tagttgaaac ttaaactatt taatgtcatt 1620
taataaagtg accaaaatgt gttgtgctct ttattgtatt ttcacagctt tgaaaatctg 1680
tgcacatact gtttcataga aaatgtag ctgttgtgt sctatataat ggtggttctt 1740
ttgcacattt agttatttaa tattgagagg tcacgagttt gggtattgaa tctgttatat 1800
actaaattct gtaaagggag atctctcatc tcaaaaagaa ttacataacc aggaagtcca 1860
tgtgtgtttg tgtagttttt ggatgtcttt gtgtaatcca gcccatttc ctgtttccca 1920
acagctgtaa cactcatttt aagtcaagca gggctaccaa cccacacttg a 1971
```

<210> 186

<211> 366

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (349)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (353)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (366)

<223> n equals a,t,g, or c

<400> 186

```
aataacaatg taattatttt yggcakascc ttgcctgact tctgaggacc tactaagtc 60
tagttctagc cttttagaaa tgggtcaactt ctttcatcaa ggctttgggt tcattactgg 120
tgtctgaatt agttccactc cttagcttgac ccagatttta gtttttatta tggatttttt 180
cttcaaactt gtttatttaa tattaagttt tcatttttgg cagcatatgg atgattttat 240
ttttaataat catatctctt agtaaaactaa tggktaaata atattaaagt ataagaggct 300
aaaattgggc caggtgtggt ggctcacgcc tgtaaatccc cgcactttng gngggctgag 360
gcaggn 366
```

<210> 187

<211> 350

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (341)

<223> n equals a,t,g, or c

<400> 187

```
aattcggcac gagaaagagt tgccaaaaat aaaaaatatt attgtaagggt aaaaaatttc 60
ataaatgggc ctaatagtgg gatggatata actgaaaact aagatggtga tgaggaagac 120
```



```
agtcaagaat aaatatacca aagtagcaaa gaaatacctg tgcaagtaga atagcttgct 180
tcaaacagat gagatttgct ctcccaacat caaaacatat cacaaaacta cagtaattaa 240
gtccctttga ggccagcact gactgggrta agcaaatagr taaatgggat gtaacaggcc 300
ttatttcaac taatagggtg ttcaccactc ctagttaggt ncctgtttcc 350
```

<210> 188

<211> 375

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (27)

<223> n equals a,t,g, or c

<400> 188

```
aattcggcac gagtgtaaac acctttinata caaatgccat catcccattt ttactgatta 60
gaaaaacttt gctattaata ggtgcaaagt ccatttcagg tataattggg aaggaactga 120
gtgcactcat gggaagaaac cttgttttgt tttttgttcg cttttcttct tatccccctt 180
tctcagtttt atggctggag acatgattta ttgcagccat ccatcttggg ggctcatcca 240
tcacacccgg gttgctagga gattgtggca gcagctgttt gctctgaatc agacagaaaa 300
gttgtcaatc atcaaaggca ggtgaatagc attagaaaca cgstattgtc agacggaata 360
attaatcaaa gagag 375
```

<210> 189

<211> 365

<212> DNA

<213> Homo sapiens

<400> 189

```
tcagacaaaa attctgtgga cagctgcgag gaattcactt ttctcttgaa actcatagcc 60
ctctcctgaa tacatatggt gtgcactaac acttgccatt atctgaaact catagcccta 120
tcctgaatgc atatgctgta ggttaccact tgccattgga ggtcttggag gccatatact 180
gtaggagcag ggtagccatg ggacttaact actattatcc cccaaaaatg ttgtgtttgt 240
gaattcacct gactgaggaa tccctaawta ttcacagat atttcaaaaag grtccatggt 300
ccmaagragg rggttttagta ttgatttttg gttgggtttg ttttatttga ggcagtgggg 360
gatga 365
```

<210> 190

<211> 817

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (778)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (791)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (801)

<223> n equals a,t,g, or c

<400> 190

```
ggcacgaggt taattttgaa acttatgctt aagatttaac cagggcagag gcatatttca 60
gcataaataa tgttgccatt ataaactctt atccttccta tctcaacagg aaatgagcaa 120
ttattgcttc atgcttcaat gcaactgtttt aaaataactgt ttaatttggt aaagggtgtga 180
actgtttaat ttatctcaca cgttttttta aacaaataact gattggacat gcgctgcacg 240
ccaggccttg ggcttggtac ctcagggttc tcacagggga ggctggaagt ggaaacaagc 300
acatgtgtaa ctggtgtgta gacagtctaa ttggtagaaa atcagcgaac aaagaagcag 360
acaaattaga aaatgaacgt aagggtgatgt gctaaaaaga gggtagccat tatgtcagtg 420
tccttcagag aaggtagcac tccctgagac cggaatggca gaaagaagtc catcctgcct 480
agcccagctt ggacttggtg agaagcaggc tgataaaaga accaaatatt gtacattttg 540
aagaagttgc ccgctgactt gagagagagg tgttgcgttt caggtgctga atgtccttat 600
aaaaagttga atatttcgag catctctatc aatacatttg aatgctgaga gcttttcctt 660
ccagaagctc atgtcatttt caacacacac ttctattttac ctttatgtag tttctaaaaa 720
ttgaaaacca gaattggagg tttttttaa aaaaaaaaaa aaaaaagccg aggkgggnaa 780
agtamaaatg ngcctkwgcc ntttcctttc cccgtcc 817
```

<210> 191

<211> 590

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (569)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (577)

<223> n equals a,t,g, or c

<400> 191

```
aattagaaag tccaaagtcg acccaaattg atattatggg cagaagtatg gtagagcaat 60
ccaaacaatt gggattatga atgggaagggt tgtaaaccct atattatttg cgtgtacgaa 120
ggaagaatcc tgtgacaagc acttactcca aaatgagtct acagttatac caagtggata 180
gtagaactta tctactggat ttccgtagta ttgatgatga aattacagaa gccaaatcag 240
ggactgctac tccacagaga tcgggatcag ttagcaacta tcgatcttgc caaaggagtg 300
attcagatgc tgaggctcaa ggaaaatcct cagaagtttc tcttacctca tctgtgacct 360
cacttgactc ttctcctggt gacctaacct caagacctgg aagtcacaca atagaatttt 420
```

ttgagatgtg tgcaaatcta attaaaattc ttgcacaata aacagaaaac tttgcttatt 480
tcttttgcag caataagcat gcataataag tcacagccca atgcttccca ttgtaatcca 540
agttatacct aatttttaac cgggggttng ggntttngga ttgcaatttg 590

<210> 192

<211> 308

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (302)

<223> n equals a,t,g, or c

<400> 192

ggcacgagaa ataaccagct gacagcatga cgacaggata aaatccacac ataccattac 60
taaccttaaa tgaaaatggg ctaaatgctc ccattgaaag acacggggca agctggataa 120
agaaccaaga cccactggag tatgctgtct tcaagaaacc catctcacat gcggtggcat 180
acataggctc aaaataaagg aatggagaaa aatatttcaa gcaaattgaa aacagaaaaa 240
agcaggtgtt gcactcctac tttctgacaa aacagrctwt gcggnntaaa ggkaaaaaaa 300
gnggaagg 308

<210> 193

<211> 343

<212> DNA

<213> Homo sapiens

<400> 193

aattcggcac gaggcctgga gaacctatgg tgattttcct gggcctgctc attgcccacc 60
attgaaccaa tcagcacaca tgtcctctct tctgagccca taaaaccct ggactcagcc 120
agactcacac agacatcagg actaccagct gcgggaagga gctagccatc tcaggtctcc 180
ttgaatcatc cagatgacct gcctgtggaa aggagctacc catcacaggt ctacttcctg 240
atgagaactg gacattcttg ggatgacttg cctgcagaaa ggagcgacat attttgggtc 300
tyctgagagc tgttctgttg ctcaatgaag ttccttcag cag 343

<210> 194

<211> 690

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (59)

<223> n equals a,t,g, or c

<400> 194

```

aattcggcac gagaggatgat atacatgata cattctcaag agttgcttga ccgaaagtna 60
caaggacccc aacccttttg tcctctctac ccacagatgg ccctgggaat caattcctca 120
ggaattgccc tcaagaactc tgcttcttgc tttgcagagt gccatggtca tgtcattctg 180
aggtcacata acacataaaa ttagtttcta tgagtgtata ccatttaaag aatttttttt 240
tcagtaaaag ggaatattac aatgttggag gagagataag ttataggag ctggatttca 300
aaacgtggtc caagattcaa aaatcctatt gatagtggcc attttaatca ttgccatcgt 360
gtgcttggtt catccagtgt tatgcacttt ccacagttgg acatgggtgt agtatagcca 420
gacgggtttc attattattt ctctttgctt tctcaatgtt aatttattgc atggtttatt 480
ctttttcttt acagctgaaa ttgcttttaa tgatggttaa aattacaaat taaattgtta 540
atttttatca atgtgattgt aattaaaaat attttgattt aaataacaaa aataatacca 600
gattttaagc cgtggaaaat gttcttgatc atttgcagtt aaggacttta aataaatcaa 660
atgttaacaa aaaaaaaaaa aaaagtcgac 690

```

<210> 195

<211> 237

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (222)

<223> n equals a,t,g, or c

<400> 195

```

tggaatctgg ctagaaagca gtaataaaca gaaatctgta tatgtttgga aaaagtaaat 60
ctcaatggaa atcagaaaat attttgaact gaaatttggt gatgaaaata ctatatatgg 120
aaacttgtag gatataattat agctaaagct gtgtagtagg aaatttagag ccttacataa 180
atacatatat tataaaaggg aaaatattaa aagttaatgg anctaaggca tccatct 237

```

<210> 196

<211> 267

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (46)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (261)

<223> n equals a,t,g, or c

<400> 196

```

cccagagta gacacatctt agtatgtact cagctttggg caaaanatag atggcgctcac 60
ctttcttcgc atgctgagct ccatagtaga ttgaggactt gggttggaag cagtaaggta 120
attgccaaag cccattatc aggtgggtac acatagagct tttgggagga acagatgcc 180
taagttatca gtttagtctt acctctctt tagagggaaa agaagttgga gaaagcgtct 240
gcagctaaca aaagtactg nccttgg 267

```

<210> 197
<211> 443
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (406)
<223> n equals a,t,g, or c

<400> 197
attgccaatg ataaaatttg aactttcaag caaaaatgca aattttgga aatgtgttat 60
ttctgccact gagaacataa cagcatacca acacttttag actttttact tttatatgt 120
ataatgaatg catcaacatt tggatgatct gtattacagg tgaaccaaca ttttccagta 180
ttagtggtgg ggaatgaccg tgtcwgaagg cttgaccagg atggggatag ctcaaggagg 240
caggatggct cattgcttat gtcttcttca ggaacacaat gaagtaggtt gagtttccag 300
gatttgggcc ctgcattggg gatggttgga ggaaaggcca aaaacctagg ttcttycags 360
ccatgggctt taaaaaacgt ggtacttttt aaggaacagg gttcanggca ggggtgtttt 420
tggggctagg gttaaggaaa atg 443

<210> 198
<211> 208
<212> DNA
<213> Homo sapiens

<400> 198
gaaaatgtgc ctttttcagt tgtcacagmt gggaatgtt actggcatcc ggtgggtaaa 60
ggctagggat gctgctagac attctacggt gcacaggaca acccccacaa caaagaatta 120
tctagcccaa aatgtcaaca atgctgaggt tgagaagycc taggaaacta aaacagtgtg 180
ggggtttgta atttattgga aaccatgt 208

<210> 199
<211> 258
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (160)
<223> n equals a,t,g, or c

<400> 199
attggttttg gccatgacac tgatttcctg gaggaagggt gctgcttcya ttcaggaatg 60
gggggtgcatg actgccctga gcagccaagg agccaattct ttaggaggct gaggccatt 120
tcagctcaag ccttcacggg gcagggccaa aagcaacttn gaggggtggg tggagcatct 180
tccactgcag cttggcccca agaaataggw tgtagcagca gytcagcttg tgggatgggtg 240
cgacaacaatt tggggggg 258

<210> 200
<211> 893
<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (870)

<223> n equals a,t,g, or c

<400> 200

```
aggggtagtt tccacaatct aatccgggtg ccatcagagt agaggagta gagaatggat 60
gttgggtagg ccatcaataa ggtccattct gggcagtatc tcaactgccg ttcaacaatc 120
gcaagaggaa ggtggagcag gtttcttcat cttacagttg agaaaacaga gactcagaag 180
ggcttcttag ttcattgttc ccttagcgcc tcagtgattt tttcatggtg gcttaggcca 240
aaagaaatat ctaaccattc aatttataaa taattagggtc cccaacgaat taaatattat 300
gtcctaccaa cttattagct gcttgaaaaa tataatacac ataaataaaa aaatatattt 360
ttcatttcta tttcattgkt aatcacaact acttactaag gagatgtatg cacctattgg 420
acactgtgca acttctcacc tggaatgaga ttggacactg ctgccctcat tttctgctcc 480
atgttggtgt ccatatagta cttgattttt tatcagatgg cctggaaaac ccagtctcac 540
aaaaatatga aattatcaga aggattatag tgcaactcta tgttgaaaga atgaactacc 600
tcactagtag ttcacgtgat gtctgacaga tggtgagttt cattgtgttt gtgtgttcaa 660
atTTTTaaat attctgagat actcttggtga ggctactcta atgccctggg tgccttggcc 720
agtttttagaa ataccagttg aaaatatttg ctcaggaata tgcaactagg aaggggcaga 780
atcagaattt aagctttcat attctagcct tcagtcttgt tcttcaacca tttttaggaa 840
ctttcccata aggttatgtt ttccmgcccn rggsatgggg ggtcattggg gcc 893
```

<210> 201

<211> 503

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (480)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<400> 201

```
aaactcactg gctgaaggag gaaatTTtag aaggaagcta ctaaaagatc taatttgaaa 60
aactacaaaa gcattaacta aaaaagTTta tTycTTTT gtctgggcag tagtgaaaat 120
aactactcac aacattcact atgtttgcaa ggaattaaca caaataaaaag atgcTTTTt 180
acttaaacac caagacagaa aacttgccca atactgagaa gcaacttgca ttagagaggg 240
aactgttaaa tgTTTTcaac ccagttcatc tgggtggatgt tTTTgcaggt tactctgaga 300
atTTTtgctta tgaaaaatca tTatTTTtag tgtagttcac aataatgtat tgaacatact 360
tctaatacaa ggtgttatgt ccttggtgat ggtactaaat gtgtcctgtg tacTTTTgc 420
acaactgaga atcctgcagc ttgggtTTta tgagtggggg catggaataa ttatgggggn 480
atgtaaaaaa aanaaaagag ggg 503
```

<210> 202

<211> 438
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (344)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (391)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (412)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (425)
<223> n equals a,t,g, or c

<400> 202
catgtgatca tttatgtgta tacagagtaa ttataaaatg tttgctgtgt acaaaaactat 60
tttatttagtg gatttttaa atattaaaatg ggtatatata gtatatatga tctaggagta 120
tatataggga actctaacaa atttataata tttattttttt aaaagaatga ccaaaccatgg 180
caaaatatta ctatgagtta gatctggaca gtggatgcaa gggctcttcat tatgttattg 240
tctgattttg tgttgaaactt atttcacaat gcagaggaaa aaatagtctt ggctcatcct 300
tagatatcac tgttcataga gccagtcacc aggacgatcc cacnttttat ggtgggccag 360
gcattggggag tccagagccc atcacccaac naccaagtga cgggtgggga cncgtggtgag 420
cctgnaaaagg gggccatc 438

<210> 203
<211> 876
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (778)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (786)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (804)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 203

```
cggcgatata tactaaattc gcgcgtgact tcatgagtag tagtgaatac aatcttcctg 60
cttctaagct tgtgtctact agaatgtctt cccctaataa gatataattg aatgtttccc 120
atgtttcttc tagtacttta atgcgtttca ttttcata ty gaaatcattg atctacttct 180
agtttykgat acaamatgtg agccaggaaa cccagttttt aaatttcaaa tagctgtcca 240
ggtgtccctg cacctcttat gcatgagccc tcgctttgtg ccaatgtgga gtgcccgcct 300
gctcacacgt gcccatgtgg agtgcccgcc tgctcatgtg cccatgtgga gtgcccgcct 360
gctcacacat gycgatgcgg agtgcccrrc tgctcacaca tgcccatgtg gagtgtccgc 420
ctgctcacac gtgcccattg ggagtgcccg cctgctcaca cacgtgtcca tgtggagtgc 480
ccacctgtc atgtgccc atgtggagtgc cactgtctca catgtgccga tgtggagtgc 540
crcctgtc caacacgtgc catgtggagt gcccgcctgc tcacrygtgc cgatgcggag 600
tgcccgcctg ctcacacgtg ccgatgcgga gtgcccgcct gctcacacgt gccgatgcgg 660
agtgtcccgc tgctcacacg tgcccatgcg gagtgtccgc ctgctcacac gtgcccgcgc 720
ggagtgtccc cctgctcaca cgtgtccgac cggagtgtcc gcctgtcac acgtgtccnac 780
gcggantgcc cgctgtctca cacntgtccga cgcggantgc ccgcctgtc acacntgtccc 840
atgtggagtg ccgcctgtc acgtgtccga tgtgga 876
```

<210> 204

<211> 1504

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1494)

<223> n equals a,t,g, or c

<400> 204

```
tgtnytccmt gtgcnacaac cygcygcaga ctggggcccy tctcagttaa ttgggtttca 60
caagcaataa tttctccaca acaaaaacca caacttgaag tgagttgaaa agagatcaat 120
agtggaaaca gtcgcctcag tactttttct ttctggattt catctctaga aatttgaagt 180
gtttgagaca gagtccaccc tttgtgcaag gcgagaacca atgaatggac tccttggtgtg 240
aattattgca tcttcttcca aagcaggttc atcaagactt tcacagagat tcatttttgt 300
tgagaagtaa ggggttaatag gaggatagaa tttggatcca aatctagtga taaaagtgtc 360
caagcaatca aaaagtaaga ttttttaggg acataccaac atcttccctt tctgctaatt 420
tcatgtcca aagatatrgc aaaaaaaaaa atcataaaaa gtgcttttgc cctacttgtg 480
ttctagtttt cccatggcag aattttgtaa ttacatccag aatatagtgt atattttgtt 540
cctcaaactt tattacattg gatggatatt gttgractgg ggcactgggtg cctatatcca 600
aggctctttc ctatcaacgt gtctgtccac gatttggtgt gtttaaagct tcattttgaa 660
aatcactgt cccctgtgg gtagtgactg tattgttttg ttcatgtcta tgtgggacac 720
attgcatcac atggcaaacc aactctctgt ggatgtgaga taagtactta taaaaccagc 780
ttgaaaacat cgtcttatgt attatgtcat cctgcatcat aatgcaatta tgtgtatcat 840
aacatgtca tttaaaaaaaa gagaaaccag caaattcatg tttgtccata gaagaatgta 900
ctcagaactt tgtgttgtga aacgatgaga acagaccacc ttaagatac ccacctgcca 960
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gaaacatcct ttagtttaca aaacagttat tctaggcttg aagcctctgg aacagcaaata 1260
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ccccagtgta tgctggcagc aaatgtgttg agttcttaaa tcttccattt ggktttctgk 1440
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ccca 1504
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<210> 205

<211> 525

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (47)

<223> n equals a,t,g, or c

<400> 205

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aaccagaggg catagaattg gggcttagtg tgtcctaaac aagctaaaag attccacctg 120
tagaatcata aaatgagagt ctcacacagt ttcatgctac tttttgtctc ttcagcaagg 180
aacggttgct gggattgtca gtgaccaggc atgtctggat agcttcacac atacacataa 240
tgcccggttc acctcagccc acacatgttc tagaagtagc cacttgccaa gtgtcagtgt 300
tcagtctaaa cagcaaattg gttaaccaca tgaacagcac tggcccatgt gagaatgggtg 360
tgaaggcctc ctttgtagca ttttccattt ctctaactca catgtgtagt ctcagcactg 420
cagaggacag atttgtttgt gccctctgag actggttgggt tggttgggtg gttagttttg 480
```

ttttatgaat cctaaaattt gtcttggsct gttaaaaaaa aaatt

525

<210> 206

<211> 2494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2471)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2485)

<223> n equals a,t,g, or c

<400> 206

caaagaaaca ttggaaacaa tttctaataga agaacaaaca cctcttctta aaaagattaa 60
cccaaccgaa tctacttcca aagcagaaga aaatgaaaaa gttgattcaa aagtgaagc 120
tttcaagaaa ccattgagtg tatTTaaagg ccccttacta cacatcagcc cagcagaaga 180
actgtacttt ggaagtacag aatccggaga gaagaaaacc ttaatagtgt tgacaaatgt 240
aactaaaaat atagtggcat ttaaggtgag aacaacagct ccagaaaaat acagagtcaa 300
gccaaagcaat agcagctgtg acccgggtgc atcagtggat atagttgtgt ctccccatgg 360
gggtttaaca gtctctgccc aagaccgttt tctgataatg gctgcagaaa tggaacagtc 420
atctggcaca ggcccagcag aattaactca gttttggaaa gaagttccca gaaacaaagt 480
gatggaacat aggttaagat gccatactgt tgaaagcagt aaaccaaaca ctcttacgtt 540
aaaagacaat gctttcaata tgtcagataa aaccagtga gatatatgtc tacaactcag 600
tcgtttacta gaaagcaata ggaagcttga agaccaagtt cagcgttgta tctggttcca 660
gcagctgctg ctttccttaa caatgctctt gcttgctttt gtcacctctt tcttctattw 720
attgtacagt taaagaagtg gtgccgggta ggaaccacgg ttccttcgtc cattagttgg 780
aaaagtaaca gacctaaac tctaccaagc tactaaaamc attgcacatc tgtgcttctt 840
aaaaggaaat atgcagcacg tggaggggaa cacatacatg tcttgaaaat aaactgctag 900
aataaagaaa tgctggagaa attgattata agagactata gctatttagt aaagtaagta 960
aaggcatatc cattgtgtaa attaatagtt taaatataat ttattttttc cttttgatct 1020
gaatactttt aaagcttaag ttttatcgtg taaatacatt agctaaactg aaaagtataa 1080
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atgtaactca tgatgatctg tgaaaccttc aaactaggac caattgactt acttgatatt 1920
ctgcctttga tatggtagta cccaccgggt attcctaaaa tcctaaaaag atacaccttg 1980

```

cagtagcaga ggcaatgaca tgagtttggt ttctcattaa tatgaccagt ttgggtctat 2040
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gttgagtttc gattgagcca tgtttgagaga ttttattact attctgaagg gtagtggtgt 2160
tggttttcat cttcaagaag ttgattccaa aactgagtta tgaagaatga tataacagtt 2220
ccttcaaaaat tggcctagga aataaaacct taaaaggaca ctggtgtgct actttgtctt 2280
aatttgggct tttctgtttc agtttgccac ctccagctgt gaaatggact gcagtcacc 2340
ctaagtactg tgcacagtat ctccctgtgt gtgtgcacag tggcttcccc ttacatggta 2400
gatttttggc cttaatatata tctaataccca aagtagttgt gtatgttttc tgttccttgg 2460
caataaaatg naggaataat ttagnccaag attg 2494

```

<210> 207

<211> 880

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (864)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (865)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (868)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (878)

<223> n equals a,t,g, or c

<400> 207

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gggcacgagc tttgacccat tcaaggatgt ctctgcctgg agaactagat cctgactcag 60
tggcagcata ggttctcccc caggggtggtg ctgaacttca gctcagaagc agcctggacc 120
ccatcttacc tccagataag gtgttttagg tactctgttg ccagtgttag tgcaacttag 180
tttaaaaata gaggacttgt tcacagtatg ctctaagtct cacactggag ttttgtgcaa 240
cataaagtag gtgatttttg agcagagcga agtctagaaa ttgccttaa attatttgtg 300
gtactctaga gaacgtggta tgtgtatgtg tgtatgtgtg tttgaatata ggaactagtt 360
cattgaacgt tagattgttc taagaccaga attagattaa aaatgcataa catattaagt 420
attaaaaagt gtttatattg tatatgaatt ttttgcggta agtttagctt ggcatttttag 480
gttttaattg atgcttaatc tgttaaaatg atgtactgta ttttaaagta ttctaattgt 540
gcttttttgt accatcttca gtatgaaaaa tgctcagtatt tagttccttt ctcaggcaca 600
attagatttt tattgacatt gttttcccc ttaactcatg taattagtca tagcaaccaa 660
gagcgaagag agtgattacc agccaattaa gaaaaatgtg accaagcaga ttgcagagta 720
caataaaacc atcgtggatg ctttacatag catcagcgga aactgagttt aagtccactg 780
aaagtctcta aggaagtatc ctcttgctgc taaacttggt acaagttgac taccaaaaaa 840
aaaaaaaaaa agccgaggkg ggcnnngtncc aagggccntg 880

```

<210> 208

<211> 640

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 208

```
tnagnaatg gacttggctc tgtaaaggat ggggaacctc acttcgtggt ggtccactgc 60
acaggctaca tcaaggcctg gccccagcag gtgtttccct cccagatgat gaccagcct 120
gaggtcttcc aggagatgct gtccatgctg ggagatcaga gcaacagcta caacaatgaa 180
gaattccctg atctaactat gtttcccccc ttttcagaat agaactattg gggtgaggat 240
aaggggtggg ggagaaaaaa tctactgtttg tttttaaaaa gcaaatcttt ctgtaaacag 300
aataaaagt cctctccctt cccttccctc acccctgaca tgtacccctt tcccttctg 360
gctgttcccc tgctctgttg cctctctaag gtaacattta tagaagaaat ggaatgaatc 420
tccaaggctt ttaggactgt ctgaaaattt gaggctgggt gaagttaaaa cacctttcct 480
tatgtctcct gacctgaaat tgtatagtgt tgatttgtgc tgagatcaag aggcaggtta 540
gawgaacctg acatccactg yttgccttgg atagtatggc ttgwttttgg aaagaaattc 600
tgaagagwgt ggaaggagag gagaaatgtc ctcatttttg 640
```

<210> 209

<211> 303

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (85)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (92)

<223> n equals a,t,g, or c

<400> 209

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ttgagcactt tctatctact agtcactgtg atacagtata agtaaagtgg gttgtctcat 60
ttaatatcca gaataaccac atgangtatg anctgccatt atctttcccc tttgtacaaa 120
tgaggaaaagt gaggtcaca gaagttaatt ggcccagggt cccacaacta gtcagtgcag 180
aggtgggggra acataaccag atttgttcgg catgkaactt gtgccaaatt tcctccaaag 240
ttcttcaaag ggcaaggcat gtttatttta tcccaattta ggcataccaa caactttaat 300
act 303
```

<210> 210

<211> 1168

<212> DNA

<213> Homo sapiens

<400> 210

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ggcacgagcg gcasgasctt gtctgaacat aatgatttca aaatttgagc ttaaaaatga 60
cactctgaaa tccagtcagt gtgcctcact agacttttctg atttcaagat tttctgcaga 120
aaatgttttg aaaactttga atacttaaaa atggcagggtg tagtattgca ctttgctagt 180
tgctcagata ccctttttta tttgtataga tattctgagt tccttttttt ttctacatgt 240
tgtacgttgt cgaaagctaa aaggaaactt atccttggat cacggaaggc agaggcattt 300
ggtgagatgg aaacaaggat gtgtaaaaat gagacgacca cctctcggat taaaaaaaaa 360
aagtgccaga gttctagggt tctaagtgat gtccaggaag gaggaggaat aatatttatg 420
gagcatatat tatggaacac agcaatcagg atgagtgaaa aattgatttg cagctgacct 480
gcaaatggaa tcatcaggaa catccctttc tcatggagtc ccttaattta caagttaact 540
gcaaacatag gagatgatag ttccaagaag gaacatttta tcgtctttgt ttttaatctc 600
aagaatggta cctaccatca gtgaatgacc tggtgcagtg ctttcattga agtgttcttc 660
gttcctcag caatatgatt gtgatgactg aaaaaggga actgtgccac tatttgtacc 720
atcattttca ccaaaatcta aaaatgcttt ttatgacgta tggagacatt cttcatgttt 780
gtttcagtg acactccttg cagatgtaaa aaactgagaa aactcacttt tggaaagtga 840
cctaaagagt gtcattgaag tgaattttta gtaggcacga tgattgtwtt catggttgct 900
gttgatcat atctcaggag ctggaatgac agacattatt gaacaaagaa atcaggatag 960
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tttcastaat cacagggtaa atataaaatt gattcattaa aaatgtttca taagaattca 1080
aaggacatag aattttgtga aatgtagtat ttttacttaa gtgcctttac tctgcttcta 1140
ccccacagcc aattttttat aaaccagt                                     1168
```

<210> 211

<211> 3133

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3069)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3114)

<223> n equals a,t,g, or c

<400> 211

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cagacctcgg acgagagcgc cccggggagc tcggagcgcg tgcacgcgtg gcakacggag 60
aaggccagtg cccagcttga aggttctgtc accttttgca gtggtccaaa tgagaaaaaa 120
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gtggaaaatg ggaggcatga aatacatcctt ttcggttggtg ttcttttcttt tgctagaagg 180
aggcaaaaaca gagcaagtaa aacatttcaga gacatattgc atgtttcaag acaagaagta 240
cagagtgggt gagagatggc atccttacct ggaaccttat gggttggtt actgctgaa 300
ctgcatctgc tcagagaatg ggaatgtgct ttgcagccga gtcagatgtc caaatgttca 360
ttgcctttct cctgtgcata ttcctcatct gtgctgccct cgctgcccag aagactcctt 420
acccccagtg aacaataagg tgaccagcaa gtcttgcgag tacaatggga caacttacca 480
acatggagag ctgttcgtag ctgaagggct ctttcagaat cggcaacca atcaatgcac 540
ccagtgcagc tgttcggagg gaaacgtgta ttgtggtctc aagacttgcc ccaaattaac 600
ctgtgccttc ccagtctctg ttccagattc ctgctgccgg gtatgcagag gagatggaga 660
actgtcatgg gaacattctg atggtgatat cttccggcaa cctgccaaca gagaagcaag 720
acattcttac caccgctctc actatgatcc tccaccaagc cgacaggctg gaggctctgtc 780
ccgctttcct ggggccagaa gtcaccgggg agctcttatg gattcccagc aagcatcagg 840
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ccttgtctta ttcacaaagc agatatttta gtcaagaatt ccagagaagg ctgctcctaa 2760
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ataggggaaa atgtaaaatg ttcagtcttt atggacaacc tgggcataaa ggagtccaat 3060
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<210> 212

<211> 680

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<400> 212

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accacgcgt ccggtaaata gctttacacc aggatggatt ctgaaatata aattctaaat 60
tatatttgtt ataactatat tttatgttgt atgttatcag gagccatcag agaatgacct 120
ttttgtgttt ggaacacttg gttccatgaa aagtatgctt tgtgttttaa ctgttaaaat 180
aatttaaaaa ttaattatatt tacataatta aagaagttaa aaactattaa cattaataaa 240
tttcacaatt tcaacatgtc aaacctatga agggagatag gaaacaatga gaaacttact 300
tttgctcctt tatacagrat tattaactat attttactaa ctaaaaaact ctagtattct 360
ttacctaaag tcaattggct ggtaagaggg agagatgcaa aattctccag ctctgaactt 420
ggagctactt cacactctac tcttaatgga aacttgaact aatgatagat agtattttty 480
tcctctatatt aaaatttttg tcttgattag gagatttttyc agtttctcca tataaattaa 540
ttttcttaca atcggattct atggcgtagg gcataatttt tggctttatt ttaaaaattt 600
tttttttagga gngggggttc ttggctccgg tcaccagggg cggggagtgg cgtggggccn 660
ggatccaggg gcttcaccgg                                     680

```

<210> 213

<211> 563

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (440)

<223> n equals a,t,g, or c

<400> 213

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aggattacag gcgttacacg cacaccgggc tgtaaaaatg tacttattct ccagcctctt 60
ttgtataaac catagtaagg gatgggagta atgatgttat ctgtgaaaat agccaccatt 120
tacccgtaag acaaaaacttg ttaaagcctc ctgagtctaa cctagattac atcaggccct 180
ttttcacaca caaaaaaatc ctttatggga tttaatggaa tctgttgttt cccctaagt 240
tgaaaaaaca ctctaaaaca ctttaaagta cttcttggc ctgggttaca tgggtcccag 300
cctagggttc agacttttgc ttaaggccmg taatytyaga aaaaaatttc caaatacatg 360
gacagagcgg aaacataaaa gaagtacttg gaccaagaaa aaagaagatg gaaaatatca 420
caagcaaatt aaaatagaan aaaatgcaac aggtttcagt tatgaatcac tttttcgcga 480
attaccttaa tgaaacagtt accgaagttt tgggatagaa aaatccttta ttttaaaact 540
tactcctcca gcttgttata act                                     563

```

<210> 214

<211> 2636

<212> DNA

<213> Homo sapiens

<400> 214

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ccagaaaact ggataataag gatctatttg gaaagtcaga cccataacctg gaattccaca 180
agcagacatc tgatggaaac tggctaattg ttcatcggac agaggttggt aaaaacaact 240
tgaatccygt ttggasgcct ttcamgatct ctcttaactc actgtgttmc ggagatatgg 300
acaaaacccat taagggtggag tgttatgatt atgacaatga tgggtcacat gatctcattg 360
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tkgaatgcat aaatgagaaa aaaaggcaaa agaaaaaaag ctacaagaat tcagggtgta 480
tcagtgtgaa acagtgtgag attacagtag aatgcacatt ccttgactat ataatgggag 540
gatgtcagct gaattttact gtgggagtggt acttcactgg ctccaatggt gacccaaggt 600
ctccagactc ccttcattac atcagcccca atggcgtaa tgagtatttg actgctctct 660
ggtctgtggg actggtcatt caagattatg atgctgataa gatgtttcca gcttttggtt 720
ttggcgctca gatacctcct cagtggcagg tatcacatga atttccaatg aacttcaacc 780
catccaatcc ctactgcaat ggaatccaag gcattgtaga ggcgtatcgg tcttgtcttc 840
ctcagataaa actctatgga ccaactaatt tttctccaat cataaatcac gtggccagggt 900
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ggatggtgat ggtggaagtc tccgctcccc attgggcgaa gtggccatca gagatattgt 1140
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cttggcagag attccccagc aggtggtggg ctacttcaat acatacaaac tccttcctcc 1260
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<210> 215
<211> 1822
<212> DNA
<213> Homo sapiens

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<221> misc feature
<222> (1816)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1821)
<223> n equals a,t,g, or c

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<210> 216
<211> 3127

<212> DNA

<213> Homo sapiens

<400> 216

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<210> 217

<211> 1529

<212> DNA

<213> Homo sapiens

<220>

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<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (458)

<223> n equals a,t,g, or c

<400> 217

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<210> 218

<211> 1100

<212> DNA

<213> Homo sapiens

<400> 218

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<210> 219

<211> 1792

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (476)

<223> n equals a,t,g, or c

<400> 219

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<210> 220

<211> 1310

<212> DNA

<213> Homo sapiens

<400> 220

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<210> 221

<211> 1369
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1347)
<223> n equals a,t,g, or c

<400> 221
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agtaaacata acattaatac ctaagtaaac ataacattac ttggagggtt gcagtttcta 1140
agtgaactg tatttgaaac ttttaagtat actttaaggaa acaagcatga acggcagctc 1200
agaataccag aaacatctac ttgggtagct tggtgccatt atcctgtgga atctgatatg 1260
tctggtagca tgtcattgat gggacatgaa gacatctttg gaaatgatga gattatttcc 1320
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<210> 222
<211> 792
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (573)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (585)
<223> n equals a,t,g, or c

<220>
<221> misc feature

<222> (599)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (699)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 222

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tgcgagaaga cgacagaagg ggagagactt gagggaggcg ctgcgactga caagcggctc 60
tgcccgggac cttctcgctt tcatctagcg ctgcactcaa tggaggggag ggcaccgcag 120
tgcttaatgc tgtcttaact agtgtaggaa aacggctcaa cccaccgctg ccgaaatgaa 180
gtataagaat cttatggcaa gggccttata tgacaatgtc ccagagtgtg ccgaggaact 240
ggcctttcgc aaggagagaca tcctgaccgt catagagcag aacacagggg gactggaagg 300
atggtggctg tgctcattac acggtcggca aggcattgtc ccaggcaacc ggggtgaagct 360
tctgattggt cccatgcagg agactgcctc cagtcacgag cagcctgcct ctggactgat 420
gcagcagacc tttggccaac agaagctcta tcaagtgcc aacccacag gcttgcttcc 480
cccagagacac ccattcttac ccaaggtgcc caccctttcc cttacccaaa aaatcaaggg 540
ggaaattttt acccaaaggt tccccaaact ttnggcccaa cgggnaacc ccaaaggana 600
caaaggaggg gtattattca gggttgccc acccanttaa ggttgcaagg aggaaaggca 660
ttttgggggg ggaaccaggg tttggggccc ccaacgttng ggtataaaaa agggttgttt 720
ccaggaggag gattgggcaa agttgttcct attttctttg gttaggagcc tntttaacaa 780
aaccagctt gt 792
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<210> 223

<211> 921

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (851)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (885)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (895)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<400> 223

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gccccctctg cagtaccccc gccctctctt tcccaccaca atgagatcct aagatggcgg 60
tggtgcggc ggttggcgt gctactgag gtcgaaaagg cgccactgg ggccgaggca 120
gccaggaaac gtgtgggcct ctctgctgct gtctccgagg gccgaccgct gccggcggcg 180
ggtcgtgggg gctgactgtc gctctgcctt tgacaggaga ggctgcttct tgtagaggaa 240
acagctttga agtgtggagc gggaaaggag cagtttctga gctgcaaaaa ctagtttcta 300
aacagagagt taattgttaa atccagtatg gccacaggag gaggtccctt tgaagatggc 360
atgaatgatc aggatttacc aaactggagt aatgagaatg ttgatgacag gctcaacaat 420
atggattggg gtgccaaca gaagaaagca aatagatcat cagaaaagaa taagaaaaag 480
tttggtgtag aaagtataa aagagtaacc aatgatattt ctccggagtc gtcaccagga 540
gttggaaggc gaagaacaaa gactccacat acgttccac acagtagata catgagtcag 600
atgtctgtcc cagagcaggc agaattagag aaactgaaac agcggataaa cttcagtgat 660
ttagatcaga gaagcattgg aagtgattcc caaggtagag caacagctgc taacaacaaa 720
cgtcagctta gtgaaaaccg aaagcccttc aactttttgc ctatgcagat taatactaac 780
aaggagcaaa ggtgcatttt acaagtcccc caaacaggag aaacggttg gttcagcaca 840
gtgttaaagg nttgttttgc tttctgggtt ttaagtaatt gaccnctttg gccanacttt 900
tccgggtgtt ntgaaggagg t 921
```

<210> 224

<211> 1979

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1949)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1953)

<223> n equals a,t,g, or c

<400> 224

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ggcgccgcc aagcgccaga cgcgagctgg gaaaaggagg gcagaggagg cggaggcaga 60
ggcagaggca gagcccggtg ccgagaccaa gcgacagacc ggcggggctg ggcctcgcaa 120
agccggctcg gcgagctctc ccgacacccg agccggggag gaaaagcagc gactcctcgc 180
tcgcatcccc gggagccgca ctccagactg gcccggtagt caggggctca ggagcagatc 240
ccgaggcagg ctttgctcag cctccgacga gggctggccc tttggaaggc gccttcaaca 300
gccggaccag acaggccacc atgaccgaga attccacgtc cgcccctgcg gccaaagccca 360
agcggggcaa ggctccaag aagtccacag accaccccaa gtattcagac atgatcgtgg 420
ctgccatcca ggccgagaag aaccgcgctg gtcctcgcg ccagtccatt cagaagtata 480
tcaagagcca ctacaagggt ggtgagaacg ctgactcgca gatcaagttg tccatcaagc 540
```



```
gcctgggtcac caccggtgtc ctcaagcaga ccaaaggggt gggggcctcg gggtccttcc 600
ggctagccaa gagcgacgaa cccaagaagt cagtggcctt caagaagacc aagaaggaaa 660
tcaagaaggt agccacgcca aagaaggcat ccaagcccaa gaaggctgcc tccaaagccc 720
caaccaagaa acccaaagcc accccgggtca agaaggccaa gaagaagctg gctgccacgc 780
ccaagaaagc caaaaaaccc aagactgtca aagccaagcc ggtcaaggca tccaagccca 840
aaaaggccaa accagtgaia cccaaagcaa agtccagtgc caagagggcc ggcaagaaga 900
agtgacaatg aagtcttttc ttgcgacac tccctcctgt ctcctatttt ctgtaaataa 960
ttttctcctt ttttctctct tgatgctcac caccaccttt tgcccccttc tgttctgact 1020
ttataagaga caggatttgg attcttcaga aattacagaa taattcattt ttccttaacc 1080
agttgtgcaa ggacagcaac aaccaatcta atgatgagaa tgtacttata ttttgttttg 1140
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tttgccatga aggtagatgt ggggtggggag aagacacaag gcagtttgtt ctggctagat 1260
gagagggaac ccaggaattg tgaggttagc aggaatatct ttagggtgag tgagttttcc 1320
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cccttctggc ctccctattt tcttagggaa ggggagtggt gtccaagtga cagctggatg 1560
ggagaagcca tagtttctcc cagtgcagct aggatgtagc cattggggga tctttgtggc 1620
ttcagcaaat tctcttgta aaccggagtg aaaacttcag ggggaagggtg gggagtcagc 1680
caagtgcctc agtgtgccct gttgaaactt aggtttttcc acgcaatcga tggattgtgt 1740
cctaggaaga cttttctttt cctctggatt tttgttcctc ctgtacaaga ggtgtctttg 1800
cttggtttgg tggggctgcg gccacttaaa acctcccgat ctctttttga gtcctttttt 1860
taaacaagtg ttacttgtgc cgggaaaatt ttgctgtctt tgtaatttta aaactttaaa 1920
ataaattgga aaagggaraa aaaaaaagna aanaaaaaaa aaaaaaaaaa aaaaaaaaaa 1979
```

<210> 225

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (506)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<400> 225

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tcgacccacg cgtccgcccc cgcgtccggg aaacaggaga tcgtggatcc tccttcaaaa 60
atggaggatg gaaagcccgt ttgggcgcca caccctacag atggatttca gatgggcaat 120
attgtggata ttggccccga cagcttaaca attgaacctt tgaatcagaa aggcaagaca 180
tttttggtc tcataaacca agtgtttcct gcagaagagg acagtaaaaa agatgtggaa 240
gataactgtt cactaatgta tttaaatgaa gccacactgc tccataatat caaagttcga 300
```

tatagtaaag acagaattta tacatatgtc gccaacattc tgwtgtcagt gaatccatac 360
tttgacatac ctaaaatata tcttcagagc ataaagtcac atcaaggaaa atctcttggg 420
acaagaccac ctccaggtct ttgcaattgc tgataagcct ttcgggacct ggaagggtgcc 480
ccaagatgag tcagtctaac catggnatcc nggagaatcc aggggccggg gnaaaccagg 540
a 541

<210> 226

<211> 277

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (135)

<223> n equals a,t,g, or c

<400> 226

tcgacccacg cgtccgtgaa taagcaatct ggcctttgag ggggctgttg cggtagacagac 60
aattctgtgg agcggcttcg gcggctccga ggagaagcaa tatgttaagg atacctctaa 120
gaagggcctt agtangcctt tctaataagt cttccaaagg atgtgttcga acaactgccca 180
cagcagcaag caacttratt gaagtatttg ttgatgggtca rtctgtcatg gtggaaccrg 240
gaackacygt cctccaagct tgtgagaagg ttggcat 277

<210> 227

<211> 2069

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2026)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2042)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2050)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2061)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2062)

<223> n equals a,t,g, or c

<400> 227

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gggtcgaccc acgcgtccgg gcgacattag ctacgcgtcg ctctactctc tctaacggga 60
aagcagcgga atacaagaga ctgaactgta tctgcctcta tttccaaaag actcacgttc 120
aactttcgct cacacaaagc cgggaaaatt ttattagtcc tttttttaa aaaagttaat 180
ataaaattat agcaaaaaaa aaaaggaacc tgaactttag taacacagct ggaacaatcc 240
gcagcggcgg cggcagcggc gggagaagag gtttaattta gttgattttc tgtggttggt 300
ggttgttcgc tagtctcacg gtgatggaag ctgcacattt tttcgaagg accgagaagc 360
tgctggagggt ttggttctcc cggcagcagc ccgacgcaa ccaaggatct ggggatcttc 420
gcactatccc aagatctgag tgggacatac ttttgaagga tgtgcaatgt tcaatcataa 480
gtgtgacaaa aactgacaag caggaagctt atgtactcag tgagagtagc atgtttgtct 540
ccaagagacg tttcattttg aagacatgtg gtaccaccct cttgctgaaa gcaactgggtc 600
ccctgttgaa gcttgctagg gattacagtg ggtttgactc aattcaaagc ttcttttatt 660
ctcgtaagaa tttcatgaag cttctcacc aagggtaccc acaccggaat ttccaggaag 720
aaatagagtt tcttaatgca attttccaa atggagcagc atattgtatg ggacgtatga 780
attctgactg ttggtactta tatactctgg atttcccaga gagtcgggtg atcagtcagc 840
cagatcaaac cttggaaatt ctgatgagtg agcttgacc agcagttatg gaccagttct 900
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taccaggttc tgtcattgat gccacaatgt tcaatccttg tgggtattcg atgaatggaa 1020
tgaaatcgga tggaacttat tggactattc acatcactcc agaaccagaa ttttcttatg 1080
ttagctttga aacaaactta agtcagacct cctatgatga cctgatcagg aaagttgtag 1140
aagtcttcaa gccaggaaaa tttgtgacca ccttgtttgt taatcagagt tctaaatgtc 1200
gcacagtgtc tgcttcgccc cagaagattg aagggtttta gcgtcttgat tgccagagtg 1260
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ttctttacta atgttattga aaccaatttc tacttcatac tgatgttttt ggaaacagca 1860
attaaagttt ttcttccatg agttgagtc ttaagaaaat gattccagtt actcattttg 1920
catatttgct attttaacat tattggaccc tgcatttata gtcccttgat ttcttccctc 1980
tccctggtgt ctccccaag accccaaata aagcaatata ctgttnaaca aaaaaaaaaa 2040
anggggggcn gccctagggg nnccaagct 2069
```

<210> 228

<211> 471

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (287)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (372)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (418)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<400> 228

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ttccagtcag cggctgcagg gtcgggctcg cgccgtcctc tccccgcccg cgccgkattc 60
taatgtagga actggtgaga agaaggtagac tgaagcctgg atttctgagg atgaaaactc 120
acataggacg acgtcagaca gactcacggt gatggagctc ccctctcccg agtctgagga 180
agtccacgag ccagattag gggagctctt gggaaatcca gaaggtcaga gcctggggag 240
ttccccctct caggacaggg gctgcaacag gtgacagtga cccattngaa gatccagaca 300
ggagagacag ctcaagtgtg caccaagtca ggaagaaacc atattctgaa atcagacttc 360
ttctggcttc anagagagct ccttagaagg ggggaagccat tccttgcat atcctgtngg 420
gaaaccttca cgtttaattc ggacctaaat aaggcatcgg antttcgcac c 471
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<210> 229

<211> 1640

<212> DNA

<213> Homo sapiens

<400> 229

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tcgacccacg cgtccgatgg cgactttggt cgaactgccg gactcgggtc tgctcgagat 60
cttctcttac ctcccggttc tgtmaccgct ggaagaggct ggtggacgac cgggtggctgt 120
ggcgacatgt cgacctgacg ctctacacga tggcgacctt aagtcattgt gcacctcctt 180
cgaaggtaga tggcatcccc gctccattcc ctgcggatgg gtggctacct gttctctggc 240
tcccaggccc ccagttgtc ccctgctctg ttgagagccc tgggccagaa gtgccccaac 300
ctgaagcgcc tctgcctgca cgtggccgac ctgagcatgg tgcccatcac cagcctgccc 360
agcaccttga ggaccttga gctgcacagc tgcgagatct ccattggcctg gctccacaag 420
cagcaggacc ccacctgtgt gcccctgctt gaatgcatcg tgctggaccg cgtccccgcc 480
ttccgtgacg agcacctgca gggcctgacg cgcttcgggg ccttgcgctc gctggtgctg 540
ggtggtacct accgtgtgac cgagacaggg ctggatgctg gcctgcagga gctcagctat 600
ctgcagaggg ttgagggtgt gggctgcacc ctgtctgccg acagaccctt gctggccatc 660
agccgccacc ttccgagatg tgcgcaagat ccggctgacc gtgagggcct ctctgcccct 720
ggcctggctg tgctggaggg aatgccggcc ctggagagtc tgtgcctgca ggggtccctc 780
gtcacccccag aaatgccctc cccactgaa atcctctcct cctgcctcac tatgccccag 840
ctcagagtcc ttgagctgca ggggctgggg tgggagggtc aggaggcgga gaagatcctg 900
tgtaaggggc tgccccactg tatggtcatc gtcagggtct gccccaaaga gtctatggac 960
tgggtgatgt aactactcca cctgcccttg ggacctatcc cagttttcat cattgagccc 1020
cagacctctt gagcagcacc ttgaagaggg cagataatca gacttgagga aactgaaagc 1080
cccaggttga gagaacagag gcctagggac ctccagacca ttggaatcac tgtttgccag 1140
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aggatgatca tagctacctc acggttacat tgcaaagcct tactctaaaa gctcccagcc 1260
tccagagggt ctcaatgaag agtcaccttc atggtcgtct tcaggaacag gacggatgaa 1320
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gaaggggtgg ggttaagact caggggcacc tgaggggtctg agccccctta tgagtaccca 1380
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taaaagtgtc caattatatt ttctgtatgt tgtatgctgt attttccaag acgtatatta 1560
ttttactatt aaagaaaaaa atcatttttt tttcccgaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa 1640

<210> 230

<211> 1970

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1952)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1963)

<223> n equals a,t,g, or c

<400> 230

cngncccagag cccagagcgc cggcggcccg actcccggcc gccccctttct ttctcctcgc 60
cggcccagaga gcaggaacac gataacgaag gaggcccaac ttcattcaat aaggagcctg 120
acggatttat cccagacggt agaacaaaag gaagaatatt gatggatttt aaaccagagt 180
ttttaagag cttgagaata cggggaaatt aatttgttct cctacacaca tagataggggt 240
aaggttgttt ctgatgcagc tgagaaaaat gcagaccgtc aaaaaggagc aggcgtctct 300
tgatgccagt agcaatgtgg acaagatgat ggtccttaat tctgctttaa cggaagtgtc 360
agaagactcc acaacagggt aggagctgct tctcagtga ggaagtgtgg ggaagaacaa 420
atcttctgca tgctcggagga aacgggaatt cattcctgat gaaaagaaag atgctatgta 480
ttgggaaaaa aggcggaaaa ataatgaagc tgccaaaaga tctcgtgaga agcgtcgact 540
gaatgacctg gtttttagaga acaaactaat tgcaactggga gaagaaaacg ccactttaaa 600
agctgagctg ctttcactaa aattaaagtt tggtttaatt agctccacag catatgctca 660
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atccaatgtg agttcatttg tggacgagca cgaaccctcg atggtgtcaa gtagttgtat 780
ttctgtcatt aaacactctc cacaaagctc gctgtccgat gtttcagaag tgctctcagt 840
agaacacacg caggagagct ctgtgcaggg aagctgcaga agtcctgaaa acaagttcca 900
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aggctcttac acagcgtcca tctatcaaaa ctatatgggg aattctttct ctgggtactc 1020
acactctccc ccactactgc aagtcaaccg atcctccagc aactccccga gaacgtcggg 1080

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aactgatgat ggtgtggttag gaaagtcac tcatggagaa gacgagcaac aggtccccc 1140
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agaagtgaat tcctctgsct tgscacacaa gctccggrtc aaagccaaag ccatgsagat 1260
caaagtagaa gcctttgata atgaatttga ggccacgcaa aaactttcct cacctattga 1320
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gcaactggcat caaaaagaac tgagtggcaa aactcagaat agtttcaaaa ctggagttgt 1500
tgaaatgaaa gacagtggct acaaagtttc tgaccagag aacttgatt tgaagcaggg 1560
gatagcaaac ttatctgcag aggttggtctc actcaagaga cttatagcca cacaaccaat 1620
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aagattagat tgtgttatca ctctgcctgt gtatagtcag atagtccatg cgaaggctgt 1860
atatattgaa cattattttt gttgttctat tataaagtgt gtaagttacc agtttcaata 1920
aaggattggt gacaaacaca gaactcctgc tncattgcat tgnnttgatg 1970
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<210> 231

<211> 310

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (262)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (298)

<223> n equals a,t,g, or c

<400> 231

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gcgagactcc gtctcaaac aaaacaaata aaaaaaacaa acagtatttt ttaggaattc 60
attttatttt aaattttgta aggaggagtt acaaaaagac aaatactaca tatgattcca 120
cttgtcatat ctagagtcaa attcatggag acagaaagta gaaagggtgg taccagcggc 180
tggaagaggag agaagtgtga gtttaatggg tatagaattt tagttttgta aggtgaaatg 240
agttctggag attggttgca cnaacagtgt gaatatactc aacactactg aactgtanac 300
ttaaagtatg 310
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<210> 232

<211> 2833

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1399)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2828)

<223> n equals a,t,g, or c

<400> 232

```
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tgtgtgtcgg gaaggaagtc agtgcctatt ctcacatgac ttggcaaaca gcaaaccgtc 180
caccatctgc aagtactacc agaagggcta ctgtgcctat ggaactcggg gcagatatga 240
ccacacgagg ccctctgctg cagctggagg tgctgtgggc accatggccc acagtgtgcc 300
ctccccagct ttccacagtc ctcaccctcc ttccgaggtc actgcatcca ttgtgaaaac 360
taactcacat gaaccggaa agcgtgaaaa gagaacattg gttcttagag accgaaatct 420
ctctggcatg gctgaaagga agaccagcc gagcatgggt agtaatccag gcagctgcag 480
cgacccccag cccagccccg agatgaagcc gcattcctac ctggatgcca tcaggagtgg 540
ccttgatgac gtggaggcca gcagctccta cagcaacgag cagcagctgt gccctacgc 600
agctgctggg gagtgccggg ttggggatgc ctgtttctac ctgcacgggg aggtgtgtga 660
aatctgtagg ctgcaagtyt tgcaccatt cgaccagag cagaggaagg ctcacgaaaa 720
gatctgcatg ttgacgttcg aaacacgagat ggaaaaggcc tttgccttcc aggcaagcca 780
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gagatttggg atttctctcca attgcaatca cacgtactgt ttgtcctgca tccggcagtg 900
gcgggtgtgcc aaacagtttg aaaacccaat cattaagtct tgtccagaat gccgtgtgat 960
atcagagttt gtaattccaa gtgtgtattg ggtggaagat cagaataaaa agaacgagtt 1020
gattgaagct ttcaaacagg ggatggggaa aaaagcctgt aaatactttg agcaaggcaa 1080
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aagccagggg gtgcggagnt tccctgtact gcagccaagg tgacgtgtga cttggatttg 1440
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gtcagaatt actttaaaag gaggtaacag ccagccatta cacctaaatt taattttatt 2700
tattaaaata acataattga gggaccatca gataactgta ttttgtcagg tgcaataaaa 2760
acaaaattaa aacccaaatc atcaagaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 2820
```

aaaaaaaaanaa aaa

2833

<210> 233

<211> 692

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (289)

<223> n equals a,t,g, or c

<400> 233

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atctccagac aagagctaca tttatggaag ttctgacaaa aatccttcaa caaggcacag 120
aatgtgacac acttgacaaa acagtattgg ctgacggtt tgagagattg gtggaactgg 180
tcacaatgat gggatgatcaa ggagaactcc ctatagcgat ggctctggcc aatgtgggtc 240
cttggtctca gtgggatgaa ctgctcgag ttctgggtac tctgtttgna ttctcggcat 300
ttactctacc aactgctctg gaacatgttt tctaaagaag tagaattggc agactccatg 360
cagactctct tccgaggcaa cagcttggcc agtaaaataa tgacattctg tttcaaggta 420
tatgggtgcta cctatctaca aaaactcctg grtcctttat tacgaattgt gatcacatcc 480
tctgattggc aacatgttag ctttgaagtg gatcctacca gkttagaacc atcagagagc 540
cttgaggaaa accagcggaa cctccttcag atgactgaaa agttcttcca tgccatcatc 600
agttcctcct cagaattccc ccctcaactt cgaagtgtgt gccactgttt ataccaggca 660
acttaccact ccctactgaa taaagctaca gt 692
```

<210> 234

<211> 1353

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1020)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1255)

<223> n equals a,t,g, or c

<400> 234

```
ggcacgagcc gatagctgct tcgggattgg cgtccgggcg gctatctagg ggctgctggg 60
aagatggcgg actcgggtgg tagccgatga ggaggccgcg gggggaaccc ggcccccg 120
ccccgagacc gactgagggg gcgacctgcg caggggcccg ggagtcattg tctccatcac 180
ccaactccat gcttcgagtc ctgctctctg ctcagacctc ccctgctcgg ctgtctggcc 240
```



```
tgctgctgat ccctccagta cagccctgct gtttggggcc cagcaaattg ggggaccggc 300
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cgaagagccc tggggagctg ctgcgctggc tgggccagaa cccagcaag gtgcgcgccc 420
accactactc ggtggcgctt cgtcgtctgg gccagctctt ggggtctcgg ccacggcccc 480
ctcctgtgga gcaggtcaca ctgcaggact tgagtcagct catcatccga aactgcccct 540
cctttgacat tcacaccatc cacgtgtgtc tgcaccttgc agtcttactt ggctttccat 600
ctgatgggtcc cctggtgtgt gccctggaac aggagcgaag gctcgcctnc cctccgaagc 660
cacctccccc tttgcagccc cttctccgag gtgggcaagg gttggaagct gctctaagct 720
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cagaggaact gactccccac gtgatgggtc tcttgccca gcacctggcc cggcaccggt 840
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cctgctggaa aaggccgtgg agctggagtc ccaggataac ggggtccccg gctttcccga 1320
aggcagcaag ttgccatttt cccagctttc atc 1353
```

<210> 235

<211> 346

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (151)

<223> n equals a,t,g, or c

<400> 235

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ggcacgagca ggatccaaaa tggcagcgct gtcgccttag ctgggagagc gagccgttgt 60
ggctgttttg gagacttatg gtcaccctga agtactgcct gcctctagtg tcgcgtccct 120
ccagtatccg atgggagcgc cgtccgcagg naatgtgtct ctctgatcat ggtgcctcgt 180
gtccagctct ggggaagacc gagacgaaat cgagtcagct ggcgttggga gagggttat 240
ttccgcttcc gcttgccac tttcaggaat ttgattctga gagcagggtc gcggttccag 300
gcaggggttg tacacatatt tgcgttggaa ggaaaaaaag aaccta 346
```

<210> 236

<211> 2271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (547)

<223> n equals a,t,g, or c

<400> 236

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acagtgatgg aaagactcac ctggacaaac cctactgtgc cccccagaaa gaatgcttcg 120
```

```
gggggattgt gggagccaaa agtccctacg ttgatgacat gggagcaata ggtgatgagg 180
tgatcacatt aaacatgatt aaaagcgccc ctgtgggtcc tgtggctgga gggatcatgg 240
gatgcatcat ggtcttggtc ctggcgggtg atgcctaccg ccaccagatt catcgccgga 300
gccatcagca tatgtctcct cttgctgccc aagaaatgtc agtgcgtatg tccaacctgg 360
agaatgacag agatgaaagg gacgacgaca gccacgaaga cagaggcatc atcagcaaca 420
ctcgggtttat agctgcgggtc atcgaacgac atgcacacag tccagaaaga aggcgccgct 480
actggggtcg atcaggaaca gaaagtgatc atggttacag caccatgagc ccacaggagg 540
acagtgnaaa atcctccatg caacaatgac cccttgctcag ccgggggtcga tgtggggaaa 600
ccatgatgag gacttagacc tggatacccc ccctcagact gctgccctac taagtcacaa 660
gttccaccac taccgggtcac accaccctac acttcatcat agccaccact tacaggcggc 720
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aaagtaaact atatatgtgc tatcaggaaa ccccttcata ctgtgtataa aattgcaatc 2220
tagtgaaata aactgtatgc aatggaaaaa aaaaaaaaaa aaaaaactcg a 2271
```

<210> 237

<211> 3050

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3024)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3031)

<223> n equals a,t,g, or c

<400> 237

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ttatagtaaa gtagtagcaa aattatTTTT aaaagacttt cttcctTTTta ctacccattt 180
cctctcttgg gaaagctgat gagcaaatta tccaagactc atttctttat taggcaaagt 240
cagaatatTTT cccctctgaa aatctgaatt atgccctcat tctTTTTTcaa gaaatatctc 300
aaagagcaaa tagaattaaa catgacactt gattgtctga ttatttgga tgtataaaat 360
tatcatgtgg cttaatgtgc cttaagtga aatttaaact tagacctgaa acctttacag 420
ttggatgtag cgttgagctt ttgcatgtyt yctgtataat aaaccacttt kgtytkgtyt 480
gtttkgctct tnaacctaca cctttatcat tactctaaca gatttagggc ttctctttct 540
ctacagctaa gtaagggaat atgtgcaatt atgagacata caaaaaagga aagggaaggg 600
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gacagagcca tggatttcct aaaatatagc tttctctttt ttcttgtatt cttagcaaat 2700
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agtatgaaaa taagagaata aaatctgtta taagcaagtg atttaggtat tttcttttgt 2820
gtttatgcat tatctgacta tattaacc acc tgtttttcta tttaccttct atcagttttc 2880
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atttaaaaaa aaaaaaaaaa aatntctcgg nctcaaggg aattcagtgg 3050

```

<210> 238

<211> 2802

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (613)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1800)

<223> n equals a,t,g, or c

<400> 238

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caggaggagaa gtgcctgctg attgtcatgg aatgtttgga cgggtggagaa ctcttttagcc 420
gaatccagga tcgaggagac caggcattca cagaaagaga agcatccgaa atcatgaaga 480
gcatcggtag ggccatccag tatctgcatt caatcaacat tgcccatcgg gatgtcaagc 540
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tatgagcgaa attgtcttta ctaaacagat ttaatagtta aaaaaaaaaa aaaaaaaaaa 2760
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaggg gg 2802

<210> 239

<211> 1537

<212> DNA

<213> Homo sapiens

<400> 239

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cgtcgccgtt tctcctttct tgggcagtat tttcccagc gccacgcgga ggctgggcca 180
ttatgagctc tgcatttcca ggacctggtc actattcagg acacggttcc agcgcagtgg 240
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ccagggtgcag agattaagga gttatctgca aagagggcta ttaatgaagt attatcgag 540
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cacaatatgc agcttactct ccataagaga aatcatacac aaaagaaatg caatcagtgt 660
ttagattgtg ggaaatactt cactcgtcaa tcaactctca ttcagcatca aagaatccac 720
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ccgtataaat gcaaggaaatg tggaaaaggc ttcagtgcgc actcttccct tgttactcat 1380
aagagaacac acagtggaga gaaaccctat acatgccatg cctgtgggaa ggccctttaat 1440

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<210> 240

<211> 1334

<212> DNA

<213> Homo sapiens

<400> 240

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gcgccttatt ctaggcactt gttgggcaga atgtcacacc tgccgatgaa actcctgcgt 120
aagaagatcg agaagcggaa cctcaaattg cggcasggaa cctaaagttt cagggggcct 180
caaatctgac cctatcggaa actcaaatg gagatgtatc tgaagaaaca atgggaagta 240
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aaaacaaagg gaaatctgaa gaagaaagtg ccgagactac taaagaaaca gaaaataatg 540
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gaccacttct ggaaggcagg gatcttctag cagctgcaaa aacaggcagt ggtaaaaccc 780
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gataaagcga atgcmacagt gggatggtct kgaacagggg atatgtttgt ttggtccctt 1320
ctgaaaaaga ggtt 1334

<210> 241

<211> 2438

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (879)

<223> n equals a,t,g, or c

<400> 241

ggtgcagttc caacagtaac agcgaaaatc atcgggtgat gcaagtactc aaacagatgc 60
cctgaaactg ncacctcca accttcaagg cttttgaga acaaagcttt attatgcaaa 120

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cccatcacac agactaaagc cacctcttgc aaaccacata cccaaaacaa agaatgccag 180
acagaagaca ctccaagtca gccagatta ttgkggkgcc agttccgtac cagkgttkgt 240
cccatacctc ttacctttat actcaatatg ctccagttccc atttggaatt ccagktccaa 300
tgcctgkccc tatgcttatt ccatcttcaa tggatagtga agataaagtc acagagagta 360
ttgaagacat taaagaaaag cttcccacac atccatttga agctgatctc cttgaratgg 420
cagaaatgat tgcagaagat gaagagaaga agactctatc tcaggagagag tcccaaactt 480
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agagctaaga gtgacatcaa atgaggactg tgggacccag atttgaagac ccaataaaaa 2400
tactcaactt tttaaaaaaa aaaaaaaaaa aaaaaaat 2438
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<210> 242

<211> 139

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (137)

<223> n equals a,t,g, or c

<400> 242

aagaccggag cttgtccgga agattkcaaa tactgcccgc aaagctcgcg ctacaaaacc 60
gggttggar cagwccggtg atggaagttg aacagggtgct ggagtcggcg cgcaaagcaa 120
tagggactag ggatcgncg 139

<210> 243

<211> 479

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (462)

<223> n equals a,t,g, or c

<400> 243

gctcgtgccg aattcggcac gaggcagttt ttgaaagttt gaaattaagt aaaaattaaa 60
agtcacaaaa gattttgcat gtcaagattc tagccttttt cttctggtgt actgagagggc 120
cagaggagcc cattctaggg actaagtatt gacagaattt ggttctgtgg caagaattac 180
ctggtgtcct agcactaagg accagtaggt cagagccctt gacttagatt tcaggacaag 240
aaacagaaaag attggaatag gattgraatg gagtctcccc gtgattttta aaaacactta 300
statggggcc asgcgcrcrk tggctcaacg cctgtaatcc cagcactttg ggaggccaag 360
atgggtggat catgaggtca ggagatcgag accgtcctgg ctaacatggg gaaaccccg 420
ctctactaaa aatataaaaa aattaaccg gccgtggtgg cngggcgccct gtagtccca 479

<210> 244

<211> 584

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (582)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<400> 244

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tgcccaccgc catctccagc tgttgccaag acagagattg ctttaagtgg caaatcacct 120
ttattagcag ctacttttgc ttactgggac aatattcttg gtcctagagt aaggcacatt 180
tggtgtccaa agacagaaca ggtacttctc agtgatggag aaataacttt tcttgccaac 240
cacactctaa atggagaaat ccttcgaaat gcagagagtg gtgctataga tgtaaagttt 300
tttgtcttgt ctgaaaaggg agtgattatt gtttcattaa tctttgatgg aaactggaat 360
ggggatcgca gcacatatgg actatcaatt atacttccac agacagaact tagtttctac 420
ctcccacttc atagagtgtg tgttgataga ttaacacata taatccggaa aggaagaata 480
tggtatcata aggaaagacm agaaatgtcc agaagattat cttagaaggc acagagagaa 540
tggaagatca ggtcagagta ttattccaat gcttactgga gnng 584

<210> 245
<211> 332
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (235)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (272)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (288)
<223> n equals a,t,g, or c

<400> 245
ggcacagcgt tcacccgaca gtgttcacag ggcccatggt acagagcacg gagcagggtc 60
ccccagggtg tgcgcttgcc agggccacat cttgagcctt cgctctgctc cttcgagagc 120
cgctgctgcc ccaccccaat ccccaaccag ccaccccctc ctgcctccct gccatctgtc 180
cctttcatcc tccttgccgt gccaaagcgc tgccatggca ccgcctgtta cctanccag 240
ctacaaatgc cagccttgaa tctgccctgg antcccttcc tctaccangt aaacagcctt 300
aactcagccc tgccactccc tgctctgaag ct 332

<210> 246
<211> 1617
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (215)
<223> n equals a,t,g, or c

<400> 246
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gcattttgtg ttggetggag ctggagtaac aagatggcgt cgtccgcgga gtgacagggg 120
tcctctgagg ccggagccgg cggcagtggg ggcagcggta tcgccgccct agctcaccgc 180
gccccttttc cagcccgga cgtcgccgcy caagnaggca gcggcgcccg ccgagaaaca 240
agtggcccag cctggtaacc gccgagaagc ccttcacaaa ctgcggcctg gcaaaaagaa 300
acctgactga gcggcggtga tcaggttccc ctctgctgat tctgggcccc gaaccccggg 360
aaaggcctcc gtgttccggt tcctgccgcc ctccctccgta gccttgcccta gtgtaggagc 420
cccaggcct ccgtcctctt cccagaggtg tcggggcctg gccagcctcc atcttcgtct 480
ctcaggatgg cgagtagcag cggctccaag gctgaattca ttgtcggagg gaaatataaa 540
ctggtagcga agatcggggtc tggctccttc ggggacatct atttgccgat caacatcacc 600
aacggcgagg aagtggcagt gaagctagaa tctcagaagg ccaggcatcc ccagttgctg 660
tacgagagca agctctataa gattcttcaa ggtgggggtg gcacccccca catacggtgg 720

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tatgggtcagg aaaaagacta caatgtacta gtcattggatc ttctgggacc tagcctcgaa 780
gacctcttca atttctgttc aagaagggttc acaatgaaaa ctgtacttat gttagctgac 840
cagatgatca gtagaattga atatgtgcat acaaagaatt ttatacacag agacattaaa 900
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cagctattcc gcattctttt caggaccctg aaccatcaat atgactacac atttgattgg 1380
gacaatgtta aagcagaaaag cagcacagca ggcagcctct tccagtgggc agggtcagca 1440
ggcccaaacc cccacaggca agcaaactga cmaaaccaag agtaacatga aaggttagta 1500
rccaagaacc aagtgcgtt acagggaaaa aattgaatmc aaaattgggt aattcatttc 1560
taacagkgtt agatcaagga ggkgtttta aaatacataa aaatttggct ctgcgtt 1617
```

<210> 247

<211> 1449

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1447)

<223> n equals a,t,g, or c

<400> 247

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gagaacgcga gtcccaggat ccccggcacc casttctctt ccactgcatt ccccgggcgc 120
gtgtgggacc gaggtggaca tggatccgca gaggtcccc ctattggaag taaaggggaa 180
catagaactg aagagacctc tgattaaggc cccttcccag ctgcctctct caggaagcag 240
actcaagagg aggcctgacc agatggaaga tggcctggag cctgagaaga aacggacaag 300
aggcctgggt gcaasgacca aaattaccac atcccacca agagttccat ccctcactac 360
agtgccacag acacaaggcc agaccacagc taaaaagtt tccaagaaga caggaccccg 420
gtgttcacac gctattgcca cagggttgaa gaaccagaag ccagttcctg ctgttcctgt 480
ccagaagtct ggcacatcag gtgttcctcc catggcagga gggaagaaac ccagcaaaccg 540
tccagcctgg gacttaaagg gtcagttatg tgacctaaat gcagaactaa aacggtgccg 600
tgagaggact caaacgttgg accaagagaa ccagcagctt caggaccagc tcagagatgc 660
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tgtccagtca gccctggatg gctatccakt atgcatcttt gcctatggcc agacargcag 1380
tggcaagacc ttcacaatgg aggggtgggt gggggagacc ccarttggaa gggctgatcc 1440
```

ctcgggncc

1449

<210> 248

<211> 1484

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1478)

<223> n equals a,t,g, or c

<400> 248

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tcgggccggt gcagatacgg gggtgctctt ttgctcataa gaggggcttc gctggcagtc 120
tgaacggcaa gcttgagcaa cgcggtaaaa atattgcttc ggtgggtgac gcggtacagc 180
tgcccaaggg cggttcgtaac gggaatgccg aagcgtggga aaaaggagc ggtggcgga 240
gacggggatg agctcaggac agagccagag gccagaaga gtaagacggc cgcaaagaaa 300
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tgcttcaag agaccaaagc ttcagagaac aaactaccag ctgaacttca ggagctgcct 540
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gtttgaatta tccacatgaa aataaagagc catagtttca aaaaaaaaaa aaaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaanngg gggg 1484
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<210> 249

<211> 2422

<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2354)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2408)
<223> n equals a,t,g, or c

<400> 249

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ccttctttta aacaaaaata cgtacaaggc ccacgcgtcc gcggacgcgt ggggagtcct 120
tctaattctt cttttctaca gacctatctg acctctccct tcttccccag gctgctcctt 180
gccaggccga gctaggtccc aattcttcct cagcctctgc tcttccaccc tataatcttt 240
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taaaaaycca gccagttca tgrctygttt ggcagcaacc ctgagacact ttacagccct 480
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tcccgcacatt aaataaaaact ccaaaaatta rawtcyggcc ctcaaaccctt acaacaggay 600
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cctggaacwc tggccmaagg ctctctgact gactccttcc cagatcttct tggcttagca 960
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ttcacttaga ctgaccctga caccattag gctcaacaaa ttacctgggc tgcactgcca 1860
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ccttaggcac tctctaatac gatrtcctag gtcctcccaa ttcttagacc ttttataact 2160
gtttttctcc ttctgttatt ccatttagtt tctcaattca tccaaaaccg tatccaggcc 2220
```

atcaccaatc attctatayg acaaatgttt cttctwacat cccacaata tcacccctta 2280
ccacaagacc tcccttcagc ttaatctctc ccaactctagg ttcccasgct gccccctaate 2340
ccgcttgaag cagncctgag aaacatcggc cattctctct ccataccaac ccccaaaatt 2400
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<210> 250

<211> 574

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (38)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (77)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (558)

<223> n equals a,t,g, or c

<400> 250

ttttatgnca aaaaacgcaa cccacgcatg aaaaatgngc caantctttc cttggaatgg 60
tctgtatttg ggtgaantcc atccagacgt caattaacac ttcctttatt ttgggggttg 120
ccaactcgtt tccccaggat ttaaagacta taacgatgat aaaagtcagt ttcgcaccct 180
gtcaaaggct tggcccggtg ccttttcctt cccggcaata ctcggttcaa ttaggtcttg 240
tcccctcatt atctgtgagg actgaattcc acccccgctt ttcaacgcag gctctttgct 300
cgggaaaagt caaaccatct ctcaaaggat caaagagctc agccatagac agagccgccg 360
gaggaaaagcg gagtcgctgc atcagatgaa agggggccct cagcctcact cctcaccgca 420
gctcctggga tcttaaagac agggtcagga ggatcaggag ggacaagagg gatggaggcg 480
aaaggctgga tccttaatcc aggccggaga caaagccgcg ccaggagagct cgcggcgcg 540
ggcccctgtc ctccggcncg agatgaatcc tgcg 574

<210> 251

<211> 1044

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1010)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1011)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1012)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1013)

<223> n equals a,t,g, or c

<400> 251

```
ggcgggctgg ctacagtaaag cggaggcagc gggggaagat ggcggcggcc gttccacagc 60
gggcggtggac cgtggagcag ctgcgcagtg agcagctgcc caagaaggac attatcaagt 120
ttctgcagga acacggttca gattcgtttc ttgcagaaca taaattatta ggaaacatta 180
aaaatgtggc caagacagct aacaaggacc acttggttac agcctataac catctttttg 240
aaactaagcg ttttaagggt actgaaagta taagtaaagt gtctgagcaa gtaaaaaatg 300
tgaagcttaa tgaagataaa cccaaagaaa ccaagtctga agagaccctg gatgagggtc 360
caccaaaata tactaaatct gttctgaaaa agggagataa aaccaacttt cccaaaaagg 420
gagatgttgt tctactgctgg tatacaggaa cactacaaga tgggactggt tttgatacta 480
atattcaaac aagtgcaaaag aagaagaaaa atgccaaaggc ttttaagtttt aaggtcggag 540
taggcaaaagt tatcagagga tgggatgaag ctctcttgac tatgagtaaa ggagaaaagg 600
ctcgactgga gattgaacca gaatgggctt acggaaagaa aggacagcct gatgccaaaa 660
ttccaccaa tgcaaaactc acttttgaa tggaattagt ggatattgat tgaaatagca 720
gtgcttcagc tctaaggata ttagcaacaa tgataaaact tggccttgaa gaaatttaca 780
caactagtta gaacttgcta ctattgtaaa ggaagagtca actggaaaat tcaaggagtt 840
aataaaatgt gtttacttgg tcccagcttt tgagagataa atcccttatg aatccctggt 900
ctaaaatact ttcttacagc tgtgtaaaaat actggtcaag gagaactttt tcctttttacc 960
tcatgttgta aacttaagtg gctcaataaa aattgatcca ctgtcttgan nnnaaaaaaa 1020
aaaaaaaaaa aaaaaaaaaa aaaa                                     1044
```

<210> 252

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 252

```
ggcacgagcg gccactgcct gccgcgwgcg gagccggagc ccgagcctga gtggcgccgg 60
gcccgaacgtg gggctccttg gccgcggcgg cgggcggggc atgctccaga ggcctgacca 120
gccatggagg ccgaggcagg cggcctggag gagctgacgg acgaggagat ggcggcgcta 180
ggcaaggaag agctagtgcg gcgcctgcgg cgggaggagg cggcgcgccct ggcggcactg 240
gtgcagcgcg gccgcctcat gcaggaggtg aatcggcagc tgcagggcca cctgggagag 300
atccgcgagc tcaagcagct caaccggcgt ctgcaggcag agaaccgtga gctgcgcgac 360
ctctgctgct tcctggactc ggagcgccag cgcggggcgg gcgcgcgacg ccagtggcag 420
ctcttcggga cccaagcatc ccgggccgtg cgcgaggacc tgggcggctg ttggcagaag 480
ctggccgagc tggaggggccg ccaggaggag ctgctgcggg agaacctagc gcttaaggag 540
ctctgcctgg cgctggggcg agaatggggc ccccgcgcgg gcccagcgg cgccggggga 600
tcaggagccg ggccagcacc cgagcttgcc ttgccccgtg gcgggccccg cgacctaggc 660
gatggaagct ccagcactgg cagcgtgggc agtccggatc agttgcccct ggcctgttcc 720
cccgatgatt gaaggcactg cttcctccac gccgacgccc gcccggttg ctccccgagc 780
cccgggaccg ctgtggacct cgggacctgg acgccgtcct gstgcgcagg agggncgcgt 840
ggcatggact aagaaatcct gacaccaaga agggccccct gctcttgctg gcagggcagc 900
agggggactg aaggctggag cggaggggact tgctgggggt tggattgggg gtaataaacc 960
cggacggaag cggaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaggrcg gccgctcgcg 1020
atctagaac                                     1029
```

<210> 253

<211> 475

<212> DNA

<213> Homo sapiens

<400> 253

```
ggcacagcca ggtgctcctg acggacttaa gtgccaaaaa ctgactccat gctaggaacc 60
actgagttct caaccagtga gtttatgatt cctatttttaa aaataacctt taaagtctga 120
ttataaaaagt agtacatagt ctttgtggaa aattttattaa gtacagtaag tgcagaagaa 180
gaaataaatc actcataatc ccagcagaca gaattaatca ctgtcatttt aggtgtattt 240
ttttgcagag taaaacatgt aaacatttta catagacata aatacaaaca tgataagcat 300
tggacatgga aaatgggcag taaattctgt acatgtgcct tcttgtattt ttgttgtatt 360
tttawatcat gcytttttgc aaaatacatt ataaattaaa catggaattt cactagtttt 420
ctgtggtatt cattttccat gggctggaat aatggtccgg tccactatat ggggt 475
```

<210> 254

<211> 1724

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (440)

<223> n equals a,t,g, or c

<400> 254

```
ggcacagtac agcaagaggg caaggacaat tgcttaagtt gacctctggg tccggaatcg 60
cgggcaaaga tggcgggcgg cagggtgttg aggcctttgc tacgcgggtcc gaggctttca 120
ttgcacaccg cggctaattg cggcgccacg gctacagaaa cgacctgcca agacgtcgcg 180
gcgacccccg tcgcgcggta cccgcggatt gtggcctcca tgacagccga cagcaaagct 240
gcacggctgc ggcggatcga gcgctggcag gcgacggtgc acgctgcgga gtcggtagac 300
```

```

gagaagctgc gaatcctcac caagatgcag tttatgaagt acatgggttta cccgcagacc 360
ttcgcgctga atgccgaccg ctggtaccag tacttcacca agaccgtgtt cctgtcggggt 420
ctgccgccgc ccccgagcga cccgagcccg agcccgaacc cgaacctgaa cctgcgctgg 480
acctcgcggc gctgcgtgcg gtcgcctgcg actgcctgct gcaggagcac ttctacctgc 540
ggcgcarcgg cgcgtgcacc gttacgagga gagcgaggtc atatccttgc ccttccttga 600
tcagctggtg tcaaccctcg tgggcctcct cagcccacac aacccgcccc tggccgctgc 660
cgccctcgat tatagatgcc cagttcattt ttactgggtg cgtgggtgaag aaattattcc 720
tcgtgggtcat cgaagagggtc gaattgatga cttgcgatac cagatagatg ataaacccaaa 780
caaccagatt cgaatatcca agcaactcgc agagtttgtg ccattggatt attctgttcc 840
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tgaaaaccac atatttggtg gctcaaaaac tgcagatcct tgctgttacg gtcacaccca 960
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aaactgaaaa agcatatttg attgagaact gtgggaatat ttaaatttta ctgaaggaac 1440
aataatgatg agatttgtaa ctgtcaacta ttaaatacat tgatttttga gacaaatatt 1500
tcttatgtca acctgttatt agatctctta ctctgctcaa attcatcact gaaagattta 1560
atttttagtta ctttttggtg atttaaaaaa aattgcattt gtatattgct aactgataag 1620
acaaattgag ttattgagct attaaatgca cattttaata taaatgcaga aatcccaaat 1680
aaaatgctaa catactgaat tcagtaatta aaagaaccca ctgc 1724

```

<210> 255

<211> 306

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (195)

<223> n equals a,t,g, or c

<400> 255

```

ggcagagcgg ctccctcagct ccaggacctt gctagcagct gccctcagga agaagtttct 60
cagcagcagg aaagcgtctc camtctccct gccagcgtgc atccccagct gtscacggm 120
agagcctgga gaccagtag ctgcagcaca gactccagra gcccagcctt ctgtcaaagg 180
cccagaacac ctgtnagcat ctgctgcaga atcaagcgac tctttcttca gaagcagtct 240
caactgcagg cctattttta tcagatgcag atagcagaga gtcctaccc acagccaagt 300
cagcag 306

```

<210> 256

<211> 890

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (862)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (881)

<223> n equals a,t,g, or c

<400> 256

```
ggcacgaggc ccggccgccc cctgccctct ccgctggcca cctgctgccg cccgcgccat 60
ggctggcaaa gcacacaggc tgagcgctga ggagagggac cagctgctgc caaacctgag 120
ggctgtgggg tggaatgagc tggaaggccg tgatgccatc ttcaagcagt ttcatttcaa 180
agacttcaac agggcctttg gggtcatgac aagagtggcc ctgcaggctg agaaactgga 240
ccaccatcct gaatggttta acgtgtacaa caagggtccac atcacgctga gcacccatga 300
gtgtgccggc ctttcagaac gggacataaa cctggccagc ttcacgaac aagtagcagt 360
gtccatgaca tagaccctgc ccttcctctt tgaattcttc cgggggaaag ggtgactgaa 420
ctgggagtcc agggaggggag ctgaggagcc cttaccctcc caccactccc ctcccaagac 480
ccagccgccg ccgttgaggg ctgagtcctt gctgtgggat gtgccagtgt cccaccaaac 540
accaggaatt tagacctttt cctgcacca ctctcttcat cctgggggct ctgttacact 600
aatttgaata aactctcccc tttctttgca acttcccagc aacaataatg attttcttgc 660
caggccgtct cttgctccct aattcatatt ccaggaagct gtgatacagg gtgaaataaa 720
gtcttgtctt agaaaccagg accctaaacc ccacactatg taatagaaac acatgtgttt 780
ttatgtctca aataaaaacta ttatatcact tggaaaaaaa aaaaaaaaaa aaaaaaaaaa 840
aaaaaaaaaa aaaaaaaaaa anaaaaaaaa aaaaagaaat naaaaaaaaa 890
```

<210> 257

<211> 1159

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (84)

<223> n equals a,t,g, or c

<400> 257

```
ggcacgaggc ggaggggaaga gcgggcgggc gggaggcgcc ggcgccagac gcggagggaa 60
ggagctacga gtagccgccg agangccgcg garccagcga cgaccgaccc agccgagccg 120
ccgccgccgc cgcgccccca tggcgggccgc caaggacact catgaggacc atgatacttc 180
cactgagaat acagacgagt ccaaccatga ccctcagttt gagccaatag tttctcttcc 240
tgagcaagaa attaaaacac tggaagaaga tgaagaggaa ctttttaaaa tgcgggcaaa 300
actgttccga tttgcctctg agaacgatct ccagaaatgg aaggagcgag gcactggtga 360
cgtcaagctc ctgaagcaca aggagaaagg ggccatccgc ctctcatgc ggagggacaa 420
gaccctgaag atctgtgccca accactacat cagccgatg atggagctga agcccaacgc 480
aggtagcgac cgtgcctggg tctggaacac ccacgctgac ttcgccgacg agtgccccaa 540
gccagagctg ctggccatcc gcttcctgaa tgctgagaat gcacagaaat tcaaaacaaa 600
gtttgaagaa tgcaggaaag agatcgaaga gagagaaaag aaagcaggat caggcaaaaa 660
tgatcatgcc gaaaaagtgg cggaaaagct agaagctctc tcggtgaagg aggagaccaa 720
ggaggatgct gaggagaagc aataaatcgt cttattttat tttcttttcc tctctttcct 780
ttcctttttt taaaaaattt taccctgccc ctctttttcg gtttgttttt attctttcat 840
ttttacaagg gacgttatat aaagaactga actcaacatt caggttgttt ttttttttgt 900
ttctaagttt ttgccctatt gaagatgact tcagaaaatc cattccccag tcatgaaat 960
```

```
gtactgtgct aactttcttt tccatagtggt aaacacttat ttatagtcac caaaaatagt 1020
gaataaaaaa cacatttgga acctggaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa ggggggggac ggacgcgtgg gcggacgcgt 1140
gggcggacgc gtgggtcga                                     1159
```

<210> 258

<211> 755

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (755)

<223> n equals a,t,g, or c

<400> 258

```
accacgcgt ccggttctag atcgcgagsg ccgccttttt tttttwttt gaagggccag 60
cttactgttg gtggcaaaat tgccaacata agttaataga aagttggcca atttcacccc 120
atcttctgtg gtttgggctc cacattgcaa tgttcaatgc cacgtgctgc tgacaccgac 180
cggagtacta gccagcacia aaggcagggt agcctgaatt gctttctgct ctttacattt 240
cttttaaaat aagcatttag tgctcagtcct ctactgagta ctctttctct cccctcctct 300
gaatttaatt ctttcaactt gcaatttgca aggattacac atttcactgt gatgtatatt 360
gtgttgcaaa aaaaaaaaaa gtgtctttgt ttaaaattac ttggtttggt aatccatctt 420
gctttttccc cattggaact agtcattaac ccatctctga actggtagaa aaacatctga 480
agagctagtc tatcagcatc tgacagggtga attggatggt tctcagaacc atttcaccca 540
gacagcctgt ttctatcctg tttaataaat tagtttgggt tctctacatg cataacaaac 600
cctgtctcaa tctgtcacat aaaagtctgt gacttgaagt ttagtcagca cccccaccaa 660
actttatttt tctatgtgtt ttttgcaaca tatgagtgtt ttgaaaataa agtaccatg 720
tctttattag aaaaaaaaaa aaaaaaaaaa aaan                                     755
```

<210> 259

<211> 714

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (665)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<400> 259

```
gtctattagc ttttacctca aaattttaag ccagaactat catctttggt tttttatttt 60
ctatctttaa acatttatct gtgaagtgcac aaatggccta cagctgtgag agcaaattga 120
catctcctcc tgaactctga gaagatgtca aaatccacag gcaacttcct cactttgacc 180
caagctattg acaaattttc agcagatgga atgcgtttgg ctctggctga tgctgggtgc 240
actgtagaag atgccaactt tgtggaagcc atggcagatg caggtattct ccgtctgtac 300
```

```

acctgggtag agtggggtgaa agaaatgggt gccactggg acagcctaag aagtgggtcct 360
gccagcactt tcaatgatat agtttttgcc agtgaattga atgcaggaat tataaaaaaca 420
gatcaaaact atgaaaagat gatgtttaa gaagctttga aaacagggtt ttttgagttt 480
caggccgcaa aagataagta ccgtgaattg gctgtggaag ggatgcacag agaacttgtg 540
ttccggttta ttgaagttca gacacttctc ctgctccat tctgtccaca tttgtgtgag 600
gcacatctgg gacactcctg gggaaagcct gacttcaatt atggaatgst ttcattgggc 660
tgtgngmagg gtccgtgttta atggaagttt ttaattacac tccntcacag tacc      714

```

<210> 260

<211> 525

<212> DNA

<213> Homo sapiens

<400> 260

```

ggctttacgg ctgcgagaag acgacagaag ggggtgggtg tgcgagrga gccggaaaga 60
tggtgggttac cagatctgca cgggctaagg ccagcatcca agccgcgtcg gctgaaagt 120
ccgggcaaaa gagttttgct gctaattgga ttcaagcgca tccagaaagt agtactggat 180
ctgatgcccg aactactgct gaatcacaga cactgggaa gcaaagtta atccctagaa 240
ctcctaaagc tagaaagagg aagagcagaa ctacaggctc actaccaaag gggactgaac 300
catctacgga tggagagacc tctgaggcag agtcaaatta ttctgtgtct gaggaccatg 360
ataccatttt aagggttaact aggagaaggc agatcttaat tgcattgtcc ccagtgtcca 420
gtgttaggaa aaagccgaaa gtaactccaa caaaggagtc ttacttgaa gaaatagtgt 480
ctgaagcaga atctcatgtt tcagggtattt ctaggaattg tgctt      525

```

<210> 261

<211> 3000

<212> DNA

<213> Homo sapiens

<400> 261

```

gaattctcgg gtgcacccac gcgtccgacc cagtggtccg gcttcccccg tgtccccca 60
tccccctccc cgcgcccccc ccgcgtcccc ccagcgcgcc cactctcgc gccggggccc 120
tcgcgaggcc gcagcctgag gagattccca acctgctgag catccgcaca cccactcagg 180
agttggggcc cagctcccag tttacttggt ttcccttggt cagcctgggg ctctgcccag 240
gccaccacag gcaggggtcg acatggcaga gacactggag ttcaacgacg tctatcagga 300
ggtgaaaggt tccatgaatg atggtcgact gagggtgagc cgtcaggcat catcttcaag 360
aatagcaaga caggcaaagt ggacaacatc caggctgggg agttaacaga aggtatctgg 420
cgccgtggtg ctctgggcca tggacttaaa ctgcttacia agaattggcca tgtctacaag 480
tatgatggct tccgagaatc ggagtttgag aaactctctg atttcttcaa aactcactat 540
cgccttgagc taatggagaa ggacctttgt gtgaagggtc ggaactgggg gacagtgaag 600
tttggtgggc agctgctttc ctttgacatt ggtgaccagc cagtctttga gataccccctc 660
agcaatgtgt cccagtgcac cacaggcaag aatgaggtga cactggaatt ccacaaaaac 720
gatgacgcag aggtgtctct catggagggt cgcttctacg tcccaccac ccaggaggat 780
ggtgtggacc ctgttgaggc ctttgcccag aatgtgttgt caaaggcgga tgtaatccag 840
gccacgggag atgccatctg catcttcccg gagctgcagt gtctgactcc tcgtgggtcgt 900
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<210> 262

<211> 966

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (935)

<223> n equals a,t,g, or c

<400> 262

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ttcatgttaa cacatccagt gtacatgaag taggcaccga gttaaactat ttgtctacta 480
tatagcatgt catcttaaaa gccttatttt ttcttcaaaa tattaacttt attttctcc 540
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caagatatgc ttctttccaa ttggacttct aaatttctag caatttctaac agtgcataaa 660
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catgtgwaca gctcctacag ctactaacct gcttctgccc tcacgggtag cgtgcacaat 900
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atgttc 966

<210> 263

<211> 2738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (762)

<223> n equals a,t,g, or c

<400> 263

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ttgacaatat ttggtgcagt gacatacttt actatcaaat ggatggtaga tgcaattgat 180
ccaaccagaa agcaaaaagt agaagctcag aaacaggcag aaaaactaat gaagcaaatt 240
ggagtgaana atgtgaagct ctcagaatat gaaatgagta ttgctgctca tctttagtagac 300
cctcttaata tgcagtgttac ttggagtgtat atagcagggt tagatgatgt cattacggat 360
ctgaaagaca cagtcacttt acctatcaaa aagraacatt tgtttgagaa ttccaggctt 420
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accgataagt ggtatggaga atctcagaaa ttggctgctg ctgtcttctc ccttgccata 600
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tcttcagttg tactttgaat ggtggggtgg aagtttcagg tgaacaatgg ataacaaaaa 2580
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<210> 264

<211> 1520

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 264

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ttccagtgtc ctctgggtgt ttccaagagc aacaagaaac gaataaatct ctgacccttc 180
tcaggtgcag ccagagagac actagcccac tgatggaygg acagacgtgg gcagggtccg 240
tgtcactaaa ccaccacca ctgccacagc tgcctacaac agacacatca gatgacactc 300
cgggcaaata aatgattttc actgaggact tactggtttt aataataggt cctgggtgtg 360
agaagtccct caacctattg tgcaatgagt tttgagaagc gggtaagctg tatgttttgt 420
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tcttttgtga ttcaaacata gtcaagagta caactgtgat atttcatgga agttatgcaa 900
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<210> 265

<211> 1568

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1318)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1320)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1469)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1482)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1502)

<223> n equals a,t,g, or c

<400> 265

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ctgctggact agctactgcc agttgtccta tcaactgtctc ttctgtagtt gctgccagtc 120
agcaactgtg tgtcactaat acccggactc cttcatcagt cagaaagcag ttgtttgcct 180
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ctgcaagtac ttctcaagca cagctttctt cacaaaagat ggagtctttc tctgctgtgc 360
caccaccaa agagaaagtg tccacacagg accagcccat ggcaaaccta tgtaccccat 420
cttcaactgc aaacagttgc agtagctctg ccagcaacac cccgggagct ccagaaactc 480

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accatccag tagtcccact cctacttcca gtaacacaca agaggaggca cagccatcca 540
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tgactttgac atcaccacaga atgggtgctg ctgataatca ggacaccagt aatttacctc 660
agtttagctgt accagcacct cgagtttctc atcgaatgca gcccagagggt tctttttact 720
ccatgggtacc aaatgcaact attcaccagg atccccagtc tatttttgtt acgaatccag 780
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agtgggga 1568
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<210> 266

<211> 545

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (338)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (540)

<223> n equals a,t,g, or c

<400> 266

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gctgttgag cttttgcaaa taccagcta atgaaaggca ctttaagattg ggccatctg 120
catcatcaca ttgaagtttt ctgtctaaag gaaggttcca gctacctgtt acccttttgc 180
taaacacagt tgcagtgttg cagtgtattt catgacaaaa gtgcactcta gttttctgtg 240
aatgattat tttctctgaa atgattcttg gtcattgtga gcttctaaat gttaaagaga 300
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acatagtgt tttgacctgt gggaaatctc atcttgnta ccatgggtgt gcacagacca 360
tcaggaagaa ctgaaaagtt caggcaactt gagnaataa aagtcaccac cmgcaaggar 420
gctgtctaaa ataaccggra gattattamc ccagcacgtg gragartgtg ctagtgggta 480
gatgttwtgg aargctacta ggggtccncc cttaggtgcc tgtgctagtc ctaagggggn 540
ggtgg 545

<210> 267

<211> 762

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (712)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (740)

<223> n equals a,t,g, or c

<400> 267

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gatgaaatca tagtagatat agccacaaaa cgtaagcagt atcccagaaa gatcctggaa 420
tgtgtcatca aaaccataaa agcaaaaacaa gaaattctga agcagtacca ccctgttgta 480
catccactgg acctaaaata tgaccctgat ccagtccttg cctgcattaa ttgaacaagg 540
agagggattt tcccaagttc tcaggatgca acctgggtatc caccttcaga ggattcacca 600
agaagtcttt ttcagttgtc ataaggaaac cagatgctwa acctgagact ttatwacaca 660
gattgaaacc acaccaacag aaactggttt caggaaaaac cttttacgtg gnacttgaaa 720
aagaaagcaa acttaaagan ttggccccc aaagaaaaat gg 762

<210> 268

<211> 1433

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (893)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (947)

<223> n equals a,t,g, or c

<400> 268

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catggaacag gacgtgtcgg ggccgctgct ggggaaagca gccgggcccc cagatgctgg 180
agcgggagca ggccccgggc ccccgagac cctccgcggc accgcccgt cttgtgcctt 240
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gccatccagc cacgggacca gctgtttgcc acgctggacg tcacggccca cgcgggcacg 540
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cctcgtgtcc tgctgtgaac tgctttccct cggaatgttt ccgtaacagg acattaaacc 1380
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<210> 269

<211> 2278

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (205)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (335)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2277)

<223> n equals a,t,g, or c

<400> 269

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ctgtagactg tcttgaatgc caagctaaag tgtttatact ttattcagta aataaacaaa 120
actggtagcg caagaaaagg agtgagcaag tggtaacaac ttaaagacaa ttcattttgc 180
tcccacgtgt tatatcatga atttnttggg cccaaagtca tatatagaat tttttaata 240
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attgatactt gattaaagaa agcacaaaga cataaaaata aaacattctt ggtgggggga 300
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<210> 270

<211> 2533

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1280)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2514)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2531)

<223> n equals a,t,g, or c

<400> 270

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<210> 271

<211> 1618

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1612)

<223> n equals a,t,g, or c

<400> 271

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atcctgtaaa tattcatgat agtctgttta tacccttttg tatatcgttg atactggatt 1560
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<210> 272

<211> 470

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (404)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (425)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (429)

<223> n equals a,t,g, or c

<400> 272

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acaaaaatgg cagacattga gtgagtactt cttgnccag tttnaattct ttccttcctt 420
ttttncccng gttgtgagtt aattggttca acttctgggt tcagggtttt 470
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<210> 273

<211> 983

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (879)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (915)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (930)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (967)

<223> n equals a,t,g, or c

<400> 273

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tcggatgtga tccgccttat tatgcagtac ttgaaggaga acagtttaca tcgggcgtta 180
gcaccttgca ggaggagact actgtgtctc tgaatactgt ggacagcatt gagagttttg 240
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gtgaattggg tgctgccagg tcaacttttga gacagactga tcccatgatc atgttaaaac 420
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ccttagctgg cgaagtcaat gtggtgcctc catctcgtct catggcattg ctgggacagg 600
cactgaagtg gcagcagcat cagggattgc ttcytcctgg tatgaccata gatttggttc 660
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aatcagaaaag gatcttaagt taccaggccc aagattaant ttatggatga tgggttgatg 900
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cccagntgg gaaaattcaa ggt 983

<210> 274

<211> 2006

<212> DNA

<213> Homo sapiens

<400> 274

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ttgttgtaag acatattgca taccaattat aattatatca attaaagttg ataaaagctt 1980
caaaaaaaaa aaaaaaaaaa aaaaat                                     2006

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<210> 275

<211> 1376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1368)

<223> n equals a,t,g, or c

<400> 275

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<210> 276

<211> 2594

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2198)

<223> n equals a,t,g, or c

<400> 276

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gcccgagcgc aggcggcgct ggcggtcaac atcagcgcag cgcggggctc gcaggacgtg 180
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cacggagcac ggcatcctga tatgaagaaa aggggtggagg atgcatacat cctcacttgt 780
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aatgggaaga ggagtcaact agaggcaagg gagttgagag agctgcaact gtaaagggca 2280
agaacaggca gaggtaaaaa gatgatggaa ggtgtggtga ctaagggccca cggttatttg 2340
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tatatatagt tggctctatc ctgcagtcct tgaaggtgaa gttgtgtgtt actaggctgt 2520
gttttgggat gtcagcagtg gcctgaagtg agttgtgcaa taaatgttaa gttgaaacct 2580
caaaaaaaaa aaaa 2594
```

<210> 277

<211> 679

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (438)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (653)

<223> n equals a,t,g, or c

<400> 277

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gctcaagggtg ctgtggtgct tcctgatcca tgtgcagggc agtatccgcc agttcgccgc 60
ctgccttgtg ctcaccgact tcggcatcgc agtcttcgag atcccgcacc aggagtctcg 120
gggcagcagc cagcacatcc tctcctccct gcgctttgtc ttttgcttcc cgcattggcg 180
cctcaccgag tttggcttcc tcatgccgga gctgtgtctg gtgctcaagg tacggcacag 240
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gcgctcatgc tttgcacccc agcacatggc catgctgtgt agcccatcc tctacggcag 360
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ggtgcagacg gccgccgggg actactcagg caacatcgag tggccagctg cacactctgt 540
tcagccgtgc ggcgytcctg ctgcgcgccc tctgargccg tcaagtccgc cgccawcccc 600
tactggctgt tgctcangcc ccagcactca aagtmatcaa agccgacttc aancccatgc 660
ccaaaccgtg gaacaaaaa 679
```

<210> 278

<211> 1478

<212> DNA

<213> Homo sapiens

<400> 278

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gccaagggct tgcacagcag caggcgtctt ggctgccac aagataatgg ctagctcccc 180
agacatggac ctggccacag tttctgctct caggaagatg ggggtgaagt tgacacccca 240
caacaaggag acggtgcagc acagtgatgt gytcttcctg gctgtgaagc acacatcatc 300
cccttcatcc tggatgaaat aggcgcgac attgaggaca gacacattgt ggtgtcctgc 360
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agggtcattc gctgcatgac caacactcca gtcgtggtgc gggagggggc caccgtgtat 480
gccacaggca cgcacgccc ggtggaggac gggaggctca tggagcagct gctgagcagc 540
gtgggcttct gcacggaggt ggaagaggac ctgattgatg ccgtcacggg gctcagtggc 600
agcggccccg cctacgcatt cacagccctg gatgccctgg ctgatggggg tgtgaagatg 660
ggacttccaa ggcgcctggc agtcgcctc ggggccagg ccctcctggg ggctgccaag 720
atgctgctgc actcagaaca gcaccaggc cagctcaagg acaacgtcag ctctcctggt 780
```

```

ggggccacca tccatgcctt gcatgtgctg gagagtgggg gcttccgctc cctgctcatc 840
aacgctgtgg aggcctcctg catccgcaca cgggagctgc agtccatggc tgaccaggag 900
caggtgtcac cagccgccat caagaagacc atcctggaca aggtgaagct ggactcccct 960
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tcactagggg gactaggggg tccccaaagt ggccccacttt ctgtggctct gatcagcgca 1140
ggggccagcc agggacatag ccaggggagg gcccacatcac tccccactgg aaatctctgt 1200
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ctgccacatg aggagggagg ccctgcctgt gtgggagggt ggttactgtg ggtggaatag 1380
tgagggcctt caactgatta gacaaggccc gccacatct tggagggcag ctgccttact 1440
gattaaaatg tcaatgtaat ctaaaaaaaa aaacaaaa 1478

```

<210> 279

<211> 2321

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (483)

<223> n equals a,t,g, or c

<400> 279

```

ggcacaggtc cgagcgccgc catggctctg ctgtccgagg gcctggacga gstgcccgcc 60
gcctgcctgt cgccgtgagg gccgccaac ccgaccgagc tgttcagcag tcacggcgcc 120
tggtcttga ggactggtgg cgggcggccc cgaagccttc gcggccttcc tgcgagcga 180
gcgcctggct cgtttctga accccgatga rgtgcacgcc attctgcgcg cggcggagag 240
gccgggagar garggcgcgg cggcggcgcc ggcgccagg actcgttcgg ctctcgcac 300
gactgctctt cgggcactac ttccccgagc agtcggacct ggagccamcg ctgttgagc 360
ttggctggcc cgccttctam cagggcgcct amcgcggcgc camgcgtgtc gagacgcact 420
tccagccccg cggcgttggc gaagggtggc cctacggctg caaggacgct ctgngccaca 480
ctnccgctcg gcgcgagagg tgattgcagt ggatcatggac gtgttcacag acatcgacat 540
cttcagagac ctgcaagaaa tatgcaggaa acaggagatt gctgtgtata tccttctgga 600
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taagattatt gggaaggttc acgaaaagtt cacgttgatt gatggcatcc gcgtggcaac 780
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gcccacagc cccaaactcc tgtctcactt ccagagcagc aacaagtgtg atcacctcac 960
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cagccacagg gacgagctcc agagcagaaa ggccattgac gctgccactc aaacagagcc 1200
aggagaggag atgccagggc tgagtgtgag tgagggtggga acacaaacca gcatcaccac 1260
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```

```
ttggtccaga tcgaccacta ctcagactga catggatgag aacattctct ttcctcgagg 1380
aactcaatct acagaagggt caccagtctc aaaaatgtct gtatcgagat cttccagttt 1440
gaagtcttcc tcctctgtgt cttcccaagg ctctgtggca agctccactg gttctcccg 1500
ttccatcaga accactgact tccacaatcc tggctatccc aagtacctgg gcacccccca 1560
cctggaactg tacttgagtg actcacttag aaacttgaac aaagagcggc aattccactt 1620
cgctggtatc aggtcccggc tcaaccacat gctggctatg ctgtcaagga gaacactctt 1680
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tcagtgcagt aacatgatgt acaggtttgt agcctgtttt gcatttttct taggttgtat 2220
gctcttctgt tttaaagggt tgaatcacca gcatttttgt gatcaaaatc ctatttagaa 2280
aaaataaaac tactttctgt ttatctcttt agaaaaaaa a 2321
```

<210> 280

<211> 1693

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (200)

<223> n equals a,t,g, or c

<400> 280

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ggcacagtgt ggagcgggtg tggggcgcca ctgcggaact gcgcgattgt ggttcccgc 60
gtatttcccg ttccccatct agtaactccc atctcagccc acgtatctcc ctgagtggaa 120
atctcggggc ccagaccagt cgattgggag gtccgccctc cccttcagcg acttggtctg 180
tgttttggca gttgccgcgn acaacagtca cttccgggaa ggggctctgc gaatctcctt 240
ccgtcgggtc gctcagaatc agctgtcctc tcagactgtg tgggtgggtt ccccgccgc 300
agctccgtac gggcttggat tgctgggcct cgggtgcacc cagcctcccc cactcgggtt 360
ctgagcttga gctggcggct ctttaactct gcttcactgt tgctcttggc aacatccact 420
tccgggagcg agtgccggtt cccccgctca ccgcgggcta gggagcgtgg gattccggac 480
tgtgagcggc tgtagtgctg tcgcagctgc tggcgatccg gcgaccctcg gccggcagga 540
cccgcggggc acgcagccgg ggccttctca acgcctcagt acctcggcgg gaccgccatg 600
gttctgctgc acgtgaagcg gggcgacgag agccagttcc tgctgcaggc gcctgggagt 660
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aatgcgtac ccagcggagg tgcatgtttt aaaaaggatg atattggacg aaggaatggg 900
caagctccaa atgagaagat gaagcaagtg ttaaagaaga ctatagaaga agccaaagca 960
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gatcccatcc gcatggagtt tgaaaataag gaagacttgt cgggaacaca ggcagggctc 1140
aacgtcatta aagaggcaga ggcgcagctg tgggtggcag ccaaggagct gagaagaacg 1200
aagaagcttt cagactacgt ggggaagaat gaaaaacca aaattatcgc caagattcag 1260
caaaggggac agggagctcc agcccagag cctattatta gcagtgagga gcagaagcag 1320
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```

ctgatgctgt actatcacag aagacaagag gagctcaaga gattggaaga aaatgatgat 1380
gatgcctatt taaactcacc atgggcggat aacactgctt tgaaaagaca ttttcatgga 1440
gtgaaagaca taaagtggag accaagatga agttcaccag ctgatgacac ttccaaagag 1500
attagctcac ctttctccta ggcaattata atttaaaaaa aaaaaaaagg ccacttactg 1560
ccctctgtaa aagatgttaa catttctagt tttcttttag tgtgaatttt taaaatagca 1620
gttattcaag gttttagaac ttaataaata cctagtcaga aaaaaatgtg taaatcgttt 1680
ttgtttcagg act                                     1693

```

<210> 281

<211> 258

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (42)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<400> 281

```

ggcagagcca ggactcagta atccctgggg ggcaggctct gnagccctcg gccacacgtg 60
gctnccggca cccatggtcc cagtgccttg gaatggagac ggccagttct ggggccagat 120
gtggtgctct ggaatccagt cccatttcc tcttgccac gagctgtccc agcggcctct 180
tcagccgcat tcagccccta cttacctggg gaccccggt ggggcacgag aagcaccagg 240
ggggttaggg cccaaagg                                     258

```

<210> 282

<211> 1764

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1764)

<223> n equals a,t,g, or c

<400> 282

```

gctgtgtcct ggagctttat ttggggagtt tyayccagaa tgggtgggaga aacctcccag 60
gtgccaggta cccgcgcatc tgacccttca cttggtgtct taggaagtca agctgagggg 120
tgctgagtcc tccctgctg gcccctgcag cccagccct gcttttcac cccacccct 180
gcaaacatgg aggagcccc tccttctcac ctcggtctcc tagcccctga catggagaas 240
cctgagacaa gccacagaac ccctcttttc taaaatggag acaataattt cctacctccc 300
aagggagcag agaggcctcg tggcacgtcc gtggccagg agcccactgt cctggctggc 360
ggcgggatcg tgcrtctc tgtctcccg atgagaagcc ccgtttccat ggtcttgacc 420
cttcctttct cccggtgtc agaactgggt ctcttgattt tgcccctaca ttatgcctct 480
gtgggaaaaa aaaaaaaatc agaccaagaa atgagcctga aattcagtgt ttaccatggc 540
tcaaggatgc ccatctggtg tccagttgcc ttttgtattc aaatgaaaat gctttgtaca 600

```

actgaggagt tacagtgaag tgtaaccag ggggccagg agcgagttga aaagatggag 660
tgagtgtatt tgcagccagg gagctgcagg gtggatttga ggggccatac cctctgagca 720
cttaaaaaag gtatttgctc caggccaggc agcaggctgt ggacaccctt gccaccactg 780
gggactgcca ctgaggactc cccgagcacg ttgttccccg tcttctccaa ggtgttgagg 840
tgagctgggg ttggccccgg cccaggcttc tgtcccaagg agaagctgcc actgacagtc 900
atcctaccgc actgctaaag agaatgttcg cagtgggtgg cggcgtgcct gtgccaaccc 960
ttccagggac ccggccatgg gggaccttgg cccaaggatg cctggggcct gccagctgtg 1020
ctgcaaargt ggggggcccc caccctaaaa ctaaccagg cccagacca ctggaggcca 1080
gggcttccct gcacgggcta aggggagttg ggatatcacc ccaaagtgc cttgccagt 1140
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ggggttcccc ctttgaggcc caccctccat actccccctg actcggctct ggctgaactg 1260
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cccatatgaa gtattcaata gttctacttg tgaatttgta tttattttga gttatacttg 1500
acacagaatt ctttttttaa aaaaatatgt gtgtattttg gaaaaaaaaat tcatagatgt 1560
taaaatttct gcatgggttac cagtttttct cacaacactg aatttggtag cttttcccga 1620
aaaaatcttc acagtaattt tttgtctgta tatatttgag ggcctttttt taaaaaaaaa 1680
aaaaraaaag aaaaatataa tkgtttgatt tttgagattw aaacaaacma aaagagaggc 1740
attttcmaaa tttcagaact ttcn 1764

<210> 283

<211> 799

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (750)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (760)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (769)

<223> n equals a,t,g, or c

<400> 283

aattcggcac gagtgcagagg ccgagtccgt cactggaagc cgagaggaga ggacagctgg 60
ttgtgggaga gttccccgc ctgagactcc tggttttttc caggagacac actgagctga 120
gactcacttt tctcttcttg aatttgaacc accgtttcca tcgtctcgta gtccgacgcc 180
tggggcgatg gatccgttta cggagaaact gctggagcga acccgtgcca ggcgagagaa 240
tcttcagaga aaaatggctg agaggccac agcagctcca aggtctatga ctcatgctaa 300
gcgagctaga cagccacttt cagaagcaag taaccagcag cccctctctg gtggtgaaga 360
gaaatcttgt acaaaaccat cgccatcaaa aaaacgctgt tctgacaaca ctgaagtaga 420
agtttctaac ttggaaaata aacaaccagt tgagtcgaca tctgcaaaat cttgttctcc 480
aagtcctgtg tctcctcagg tgcagccaca agcagcagat accatcagtg attctgttgc 540

tgtcccgcca tcaactgctgg gcatagaggag agggctgaac tcaagattgg aagcaactgc 600
agcctyctca gttaaaacac gtatgcaaaa acttgacagag caacggcgcc gttgggataa 660
tgatgatatg acagatgaca ttcctgaaag ctcaactcttc tcaccaatgc catcagagga 720
aaaggytgct ttcccttccc agacctctgn ttttcaaaan gccttcggna acttccagtt 780
ggccaaaaaa ggggcccgt 799

<210> 284

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 284

aggtagactg tggcaatrag gcagctaagt gggtcaccaa cttcttgaaa actgaagcgt 60
atagattggt tcaattttag acaaacatga agggaagaac atcaagaaaa cttctcccca 120
ctcttgatca gaatttccag gtggcctacc cagactactg cccgctcctg atcatgacag 180
atgcctccct ggtagatttg aataccagga tggagaagaa aatgaaaatg gagaatttca 240
ggccaaatat tgtggtgacc ggctgtgatg cttttgagga ggatacctgg gatgaactcc 300
taattggtag tgtagaagtg aaaaaggtaa tggcatgccc cagggtgtatt ttgacaacgg 360
tggaccacga cactggagtc atagacagga aacagccact ggacaccctg aagagctacc 420
gcctgtktga tccttctgag agggaattgt acaagttgtc tccacttttt gggatctatt 480
attcagtgga aaaaattgga agcctgagag ttggtgaccc tgtgtatcgg atggtgtagt 540
gatgagtgat ggatccacta ggggtgatatg gcttcagcaa ccaggaggga ttgactgaga 600
tcttaacaac agcagcaacg atacatcagc aaatccttat tatccagcct tcaactatct 660
ttaccctgga aaacaatctc gatttttgac ttttcaaagt tgtgtatgct ccaggttaat 720
gcaaggaaaag tattagaggg gggaatatga aagtatatat ataaatttta ggtactgaag 780
gctttaaaaa taattaagat catcaaaaat gctattttga atgttatcat ggctattaca 840
cttttacttc ctgactttaa tattgatgaa taaagcaagt ttaatgratc aactaaaaag 900
ctgcaaaaat gtttttaaaa tgtgtgcctt ttattaccta tcagtctatg ttttgggaga 960
aatgggaagc aacagatcac tgtgtcctsa tgtgcaggac gcatgttacc acactcacia 1020
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tttactctag cattatggaa tctgggctgt acttgagtat ggaaattctc ttatagactt 1140
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aaataatttt ttcgtaacaa agaaacgaac aactttggta tgatcttaag caaaaatact 1380
cactgaaata gtatgtggat gaattcacct acttacaatt ttatggtttc tttgtaaata 1440
ataaatgtga atctcaattt tstaataaaaa aaaaaaaaaa aaaagttct 1489

<210> 285

<211> 702

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (695)

<223> n equals a,t,g, or c

<400> 285

ggcagaggct cccaaaatgg tgggattaca ggtgtgtggg ccaccgtgcc tggctgattc 60
agcatttttt atcaggcagg accagggtggc acttccacct ccagcctctg gtcctaccaa 120

```
tggattcatg gagtagcctg gactgtttca tagttttcta aatgtacaaa ttcttatagg 180
ctagacttag attcattaac tcaaattcaa tgcttctatc agactcagtt ttttgtaact 240
aatagatttt tttttccact tttgttctac tccttcccta atagcttttt aaaaaaatct 300
ccccagtaga gaaacatttg gaaaagacag aaaactaaaa aggaagaaaa aagatcccta 360
ttagatacac ttcttaaata caatcacatt aacattttga gctatttcct tccagccttt 420
ttagggcaga ttttggttg tttttacata gttgagattg tactgttcat acagttttat 480
accctttttc atttaacttt ataacttaaa tattgctcta tgtagtata agcttttcac 540
aaacattagt atagtctccc ttttataatt aatgtttgtg ggtatttctt ggcatgcac 600
tttaattcct taccctagcc tttgggcaca attccygtgc ttcaaatga gagtgacggc 660
tgggcatggt gggctcccgc ctgtaaatcc cagtnacttg gg 702
```

<210> 286

<211> 1175

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1166)

<223> n equals a,t,g, or c

<400> 286

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ctaaagggaa caaaagctgg agtccaccg cggtagggcg cgctctagaa ctagtggatc 60
ccccgggctg caggaatggt actattttcta catgttgtcc atgatgtgac ttcgtaaac 120
cttcaaaatt atttgggcat agtgctctat gtttaataaa ggtttttata gatgtttat 180
tccatatgtc ttcacaagtc aggaccaca attaccctg ttttgttga acagcagtgt 240
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<210> 287

<211> 2873

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (829)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2870)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2871)

<223> n equals a,t,g, or c

<400> 287

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```

<210> 288

<211> 2104

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (44)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (497)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1323)

<223> n equals a,t,g, or c

<400> 288

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gtaaggggtg ctgtgcgact gcggccattt gtggatggaa cagcgggagc aagtgatccc 180
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gagggccggc catgggncct ttctgtcacc atgtcttacc tagagatcta ccaggagaag 540
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cacttctctc cagccagtcg aaatcggact gtaggagcca cccggtcaa ccagcgctcc 720
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cgccagcgag agggaaaact ctacctgatt gacttggctg ggtcagagga caaccggcgc 840
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aaaa 2104

<210> 289

<211> 1251

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1194)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1211)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1215)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1231)

<223> n equals a,t,g, or c

<400> 289

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aactattggt acggggctag agaggaaggc tttgggattg ccggggagca gcgagcgacc 120

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gacttccggt tccagttacc aaggcacgag gatccggtgt tccaacccag ggggaaaaat 180
gcggcctttg actgaagagg agaccggtgt catgtttgag aagatagcga aatacattgg 240
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<210> 290

<211> 1591

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (768)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1538)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1560)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1568)

<223> n equals a,t,g, or c

<400> 290

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ttgtttacat tatgttctag actggccccc tgaatctcca gacaaccaat atcacttaaa 180
taagtgatag tcttaatact agtttttaga ctagtcattg gagaacagat gattgatgtc 240
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```

<210> 291

<211> 2386

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (448)

<223> n equals a,t,g, or c

<400> 291

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aaattgacat tccatctgtc tttattgggt aatcatcagc taattctctg aaagatgaat 660
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taaggatttt tatatggcct tgtatgaggg gagtttgaat gttaataaac atgttttcca 2340
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<210> 292

<211> 983

<212> DNA

<213> Homo sapiens

<400> 292

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ataaattaat aaatgggcta ttaattctg tatawaaatt tacagcaagt acgtacactg 900
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983

<210> 293

<211> 2655

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2595)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2651)

<223> n equals a,t,g, or c

<400> 293

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aaaaagcaca ctcatgagaa tgtgaaagaa actgccatcc aaacagaaga ttctgctatt 240
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gacggccatt aaatgttacc ctgccacacc actgcacttc acttccactt cagaccaact 1320
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tgatttcact taccagcaca ttctctacaa tgggtgactta gacaaaagta taagattcat 1620
agactttata tttgtatgac atacaactag gacaaacata gatatgacat ttgctgcctc 1680
agtgtagcaa ttggaaatat ttataagtta tatgaaagcc tgttttgggc tgaaagaatg 1740
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aatcacttag tgtgaaagac ttgccttggtg tattctttat gtaattacaa atcactgtca 1860
attttatggg aagctcatag tattttaata ttttattaac atggaactct tgttttttta 1920
atcttttagaa cttaaattct acaagaattt taaatatatt ctgtatataa ttatgacatt 1980
gtcacacaga aattacacat tttatgtgcc agaagcctta aacatctttc tgtgaaaatg 2040
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tgtttatatt gaaaaacttt aaagactatt tggaagtcc agaaattctg gttttaattc 2160
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gaaggaactt acttctgtgg tgtgacataa ttggacaaac tacctacaga gatttaaagc 2580
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ntgcttgaaa ntttg 2655
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<210> 294

<211> 1738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (854)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1679)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1693)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1717)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1729)

<223> n equals a,t,g, or c

<400> 294

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caacctgat gcaattgtag ttcgaaagat ggctatctca gctgttgctg gtatccttaa 180
acagctaaaa agaaccacaa aaagctgacc attaacccct gtgaaatcag tggatgccct 240
aaaccacccc aaattattgc tggatgatagg cctgataatc attgggtgca ttatgacagc 300
aaaactatac caagaactaa aaaagaatgg gagtcaagtt gctttgtgga aaaaactcac 360
tggggatact acacctggcc aaagaatatg gttgtttatg ctgggtgga agagcagcct 420
aagcttgga gaagcaggga ggatatgaca gaggcagaac agattatatt tgatcatttt 480
tctgatccta aatttgttga gcagttaatt acttttctat cattagaaga cagaaaagga 540
aaagataagt ttaatccacg acgtttttgy ctctttaagg gtatattcag gaattttgat 600
gatgccttcc tgccagttct gaagcccat ttagaacatt tgggtgcaga ttcacatgaa 660
agcaccagc gatgtgttgc agaaattata gctggtttaa tcagagggtc taagcactgg 720
acatttgaag aggtggagaa gctttgggag cttctgtgcc ctctgcttag aacagcactg 780
tccaatatta ccgtagaaac ttataatgac tggggagcct gtatagcaac atcctgtgaa 840
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tactgctcga attctggaga aattgaaacc tctcatggat gtggatgaag aaattcagaa 1200
ccatgttatg gaagaaaatg gaattggtga agaagatgag cgaactcagg gcattaaact 1260
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tagctacgat gaactgaaaa gagatgcaaa gttatgttta tcattaatgt ctcaggggtt 1440
gctttaccct catcaagtgc ctttggtact tcaggtgcta aaacaaacag caagaagcag 1500
ttcttggcat gcacgataca cagtactgac ctacctccag accatggtat ttataacct 1560
ctttatttcc taaacaatga agatgcagtt aaaggatatt aggtgggctg ggtataagt 1620
cttttgggag ggacgaacca actgggaggg ttccggagaa atgggctggc ctaacttanc 1680
cttaagccgg gtntggctaa acagtggtaa acttttncct taacccatng ggaccagt 1738
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<210> 295

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (31)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<400> 295

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ctgctgttcc ctccgsgtgg agcacgtcca gctgcacccg gaggccgatg gctgccaaca 180
cgtggtggaa tttgacttcc tggggaagga ctgcatccgc tactacaaca gagtgccggg 240
ggagaagccg gtgtacaaga acttacagct ctttatggag aacaaggacc cccgggacga 300
cctcttcgac aggttgacca cgaccagcct gaacaagcac ctccaggagc tgatggacgg 360
gctgacggcc aaggtgttcc ggacctacaa cgctccatc actctgcagg agcagctgcg 420
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ccgagtcgtg gccatttctt gcaaccatca gcgagcaacc ccagtagctg tcgagaagtc 540
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agagctgagg agggcgaggg ctgagcacia agcccaaggg gatggcaagt ccaggagtgt 660
cctggagaag aagaggyggc tcctggagaa gctgcaggag cagctggcgc agctgagtgt 720
gcaggccacg gacaaggagg agaacaagca ggtggccctg ggcacgtcca agctcaacta 780
cctggacccc aggatcagca ttgcctggtg caagcggttc aggttgccag tggagaagat 840
ctacagcaaa acacagcggg agaggttcgc ctgggctctc gccatggcag gagaagaactt 900
tgaattctaa cgacgagccg tgttgaaact tcttttgtat gtgtgtgtgt ttttttact 960
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```

<210> 296

<211> 684

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (675)

<223> n equals a,t,g, or c

<400> 296

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tgtacatctt ccaaagcttt taaaataaaa aagaggagga gttacacttg cagaatgtat 120
atcttctggg atgcttctcc ctactccact ggacactgtt tgaaagtttg tagtttataa 180
tattcttacc taggctgtgt tggtcagctt agaatatcta agtgatagga taaaactaaa 240
gctgagtggc aaactgccag tctatatact gcatttagtc tataggctgt tttgtttggc 300
ccacaaagca ttttattatt taagtttatg ccaacattta agaatcaaga atttcccaga 360
cattcagatt tctgacttca attgaaaatc tgacagtata aaccctatta tattcctgca 420
tggcataaaa tcttcagttg ctgaatggtg atatccactt ttagaaagag tactctaccc 480
tgttctgcat tcatacaacc taagccaacc cgcccttcac catcccactt ctctttcagg 540
ttatctgctt aggctggtag gcatttgtgt ttataaacct tgaactcaag ctgctagatg 600
gtcagttgca ttgtgaactg aactatctga atgatttttc attgtaaata tatagctatn 660
ggaccacttt aaatnccctt ttct 684
```

<210> 297

<211> 1838

<212> DNA

<213> Homo sapiens

<400> 297

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ggagaagagg ctaatgatga caagaagcca accactaaat ttgaactaga gcgagaaaca 180
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aaggtggctg ttttcaactg gcatggctgt tctgtgcaac tgagcggccg cactgaggtg 360
gcttatgtct ccaaggacac tcctatgttg ctttacctca acactcacac agccttggaa 420
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cccactgatg tgggcaagtc tacagtgtgt cgccttctgc tcaactacgc agtgcgtttg 540
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accatggggg ccctctacat cgagcggcct gcagatgtcg aagagggttt ctctatccag 660
gcccctctgg tgtatcattt tggttccacc actcctggca ctaacatcaa gctttataat 720
aagattacat ctggttttagc agatgtgttc aaccaaaggt gtgaggtgaa ccgaaggcat 780
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tggtactagta gaaagtccat attctacctc taaaaacagg tagtggtaac ctgactcttc 1560
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gccactttga attctctaag accctggaga attgcatttc tttcactgtg ctactatgtg 1680
gtttttaaaa aatcaatgct ttatattcca tatgtggttc ttacctattt atctaggatg 1740
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taaatatttt tgccatatca taaaaaaaaa aaaaaaaaaa 1838
```

<210> 298

<211> 1635

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1609)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1635)

<223> n equals a,t,g, or c

<400> 298

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tcgcgtcacc acagaggcaa gacaagggtc catatcgcgg catccggctc ccgccgtct 180
tcaggagaga aagaaaaaat aaaatatact tggggaagtt gtacctgcca gaattagcaa 240
gagctttctt taagaagaca tttgtcaaac tcaacaaatt gaaggttaac accttaagag 300
ttgtagttac tgaccagaaa tatggacaga cttcttagac ttggaggagg tatgcctgga 360
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tcttccctgg cactgttaaa aatgttaaaa catggccgtg ctggagttcc aatggaagtt 480
atgggtttga tgcttgagga atttgttgat gattataccg tcagagtgat tgatgtgttt 540
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gaagccttgt cggagagagc tgtggcagtg gttgtggatc ccattcagag tgtaaaagga 780
aaggttgtta ttgatgcctt cagattgatc aatgctaata tgatggtctt aggacatgaa 840
ccaagacaaa caacttcgaa tctgggtcac ttaaacaagc catctatcca ggcattaatt 900
catggactaa acagacatta ttactccatt actattaact atcggaaaaa tgaactggaa 960
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tacagtgaac attgtaaaca caatgaatca gtggtaaaag agatgttgga attagccaag 1080
aattacaata aggctgtaga agaagaagat aagatgacac ctgaacagct ggcaataaag 1140
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gaaaaacgct attaatgatg ccttcagtgt atattcctct gttgttccta atgctcaaaa 1320
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agattctaaa gttatacatg aatacatcaa agtggacaaa ttttgtaag atcccattta 1500
atatttgaaa aaatcagtag cacaaatata ttttgattgt cacttacaaa ataaaaatata 1560
tttacagtcw aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaana aaaaaaaaaa 1620
aaaaaaaaaa aaaaan
```

1635

<210> 299

<211> 868

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (790)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (857)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (860)

<223> n equals a,t,g, or c

<400> 299

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gctacacccc agactggccg agcctggatt ctccggcgct gccggcctgg ttcgacgaag 180
ccaagtccgg ggtgttcac cactggggcg tgttctcggt gccgcctgg ggcagcgagt 240
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accgggagag tgggcccagc tcttcaggc cgcggggcgc aagtatgtag ttttgacgac 420
aaagcatcac gaaggcttca caaactggcc gagtcctgtg tcttggaact ggaactccaa 480
agacgtgggg cctcatcggg atttggttgg tgaattggga acagctctcc ggaagaggaa 540
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taagaaaaat ggcttcaaaa cacagcattt tgtcagtgc aaaacaatgc cagagctgta 660
cgacctgtgt aacagctata aacctgatct gatctggtct gatggggagt ggaatgtcc 720
tgatacttac tggaactcca caaattttct ttcattggsty tacaatgaca gccctgkcaa 780
ggtctctgtn gggtcggtga gggcaaggac cctgttttat tcaacctggg aactcagtgt 840
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<210> 300

<211> 547

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (526)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (542)

<223> n equals a,t,g, or c

<400> 300

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gctcgcgcca gctcgctccc gcagccatgc ccaccaccat cgagcgggag ttcgaagagt 120
tggaactca gcgtcgctgg cagccgctgt acttggaat tcgaaatgag tcccatgact 180
atcctcatag agtggccaaag tttccagaaa acagaaatcg aaacagatac agagatgtaa 240
gcccatatga tcacagtcgt gttaaactgc aaaatgctga gaatgattat attaatgcca 300
gtttagttga catagaagag gcacaaagga gttacatctt aacacagggt ccacttccta 360
acacatgctg ccatttctgg cttatggttt ggcagcagaa gaccaaagca gttgtcatgc 420
tgaaccgcat tgtggagaaa gaatcgagt gtgaaacaga acaatatctc actttcatta 480
tactacctgg ccagaatttg gagtcccttg aatcaaccag cttcanttct caatttcttg 540
gntaaag 547
```

<210> 301

<211> 865

<212> DNA

<213> Homo sapiens

<400> 301

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ttagtagaga tggggtttca ccacattggc caggctggtc tcaaactcct gacctcaagt 60
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gcctaatact gctttattac aacgttatct gtgggtcgga atccttttat attgggtaac 180
agatgacctt gactcagaat aatctttttc aatggctttt tgagggaagc ttgtgaagtt 240
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tgtatttgtt aaagggacag gacaagacag ccttaaaaaa ttgaatatag ttgggtgagac 360
aactcagaag tacaggtttg agcatccctt attcaaaatg cttgagaagt gttttgggtt 420
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aaaggaagaa gagattattt ttgtgggaga acagttttct ccatagtgtt tcctgtggaa 660
tgctagtgtc tcataaagtc ttcyaaaaaa aaaaaaaa aatcaaatgt ttggaagcca 720
ttttgtgtta ctgtgtgact ttcttttact caaaaacagc accataaaat ttctgacaag 780
tactataggt aaagaaatcc ctttataactt aacctagtat tttctacctt tccccatcta 840
aaataaaatt tttataccac tttct 865
```

<210> 302

<211> 815

<212> DNA

<213> Homo sapiens

<400> 302

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agcctttcac tttctccagc cctgccagtg gcagtctatt cgttctcctt ccctttcaga 120
ctgagaaggg gacaaaaaga cttttccttt catgtccaga agaatgtatg taactaaagc 180
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attaggaaaa tgtgttttgt agttctggat aaactatttc atccgctgtt tcctcccaa 360
aacacacaca cagagcaaac tccctttcat aaaagccctc atatccactg gcagtccccg 420
ttcgcatcat ggtctccatg tgtaccgcca aagtcaatta tgtttgaaag ctttggtgg 480
atgttatggg gcaaagttat gatttacaca gaagcaactg ccaaatctgt ggtgcaacca 540
ctatctccag tgaaatattg tataacacca tttggaacta ctgaaaagac agtggctttt 600
ctacagtact cttccttatt gcaccatttt tgtattaacg tagaaactaa gcatcagaat 660
ttatgaacaa agaatatgtt atttttccyt ttgcyctaaa atactgagga tttggggaaag 720
caattcyttt ttaaaaaaat tttggaataa ctaycttttg rtacacattc gggsggttac 780
ggtgttgggg atttaggcag gactatccaa atccc 815
```

<210> 303

<211> 1919

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 303

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actgacagta cggtcggaat tcccgggtcg atccacgcgt ccgcggacgt ggsacaaaaa 60
cagatgctag gaagcttggc ttcctcttct tgttgacctt tttttgaacc aacatctttt 120
ttattatatt cagagtatgt ttttaagtgt atcttaatat atacattttt taggacatct 180
taaatactaaa caaaaaataa aatgaacatc tcttgaaacc tggtaaaaca accagttaaa 240
```

gccacagatg gctttcaggg cagtagcagc agaggccagt ggactctgag gactcctgag 300
gggcggggcg tgtagccagc caggtgcatg ccgggacccat ggcccccata cttggctgct 360
tcctgtgaca gtgaaataca tccttcaagg tggcagctgt tagggctgaa tcttctggag 420
aaaaaggtgc catctcagga gaatagcttt tactctggta ggaatgcttc cgagacacca 480
caaggcagcc tgaacactca gttgcagggg cgggcttgcg gtgggtgacc cagagccacc 540
aaagtcacat ccacaactaa tgagggaagt ctgtaaagcc agttagatag aagaatttta 600
tttttctgtg ggttttgtgt tgtctttttt atgttaaaaa gaaatccagt ttgtgttttt 660
ctatagraaa agtaaaagat caggttatatac tttaggttag gggttctatt tattcctggt 720
agtaataaaa attaacaaat ttctttgttt aacaaaagat taatctttaa accactaaaa 780
tacatagact gattgattat tcaacacatt ggaattgatg tcggtcatag tttcctgaag 840
catttagtta caacctgaag gaataaaatg atttgtggaa atgcttaaaa tagacctaac 900
tgaatacagt ctcatcttgc cgcgcctggc ttacctatct gtggaaagct aggcctccca 960
ggctgggctc tgctgtctgg tgctggagg tgtgggaggg aagatgagtt atttaactgg 1020
taagcgattt gaaacactat ttttatatta aagtaaatgg catggagtat agtgcaaat 1080
catttttaag atagaacaca aaacttgaaa gaagttttat gcgtgtgaca gtgtatgggg 1140
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agtgtcagt gaagtacacc tgtgtggccc agttctgaaa gctttataca gttgaatttt 1260
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ttgagatttt cctccatttt tatttcttcg tgaacataga gtttggggcc gaaaatgttt 1440
ttaaagtatg tgtttgagtt aaatataaag ttggttcaact tcaaagctaa aaaattgtta 1500
aacttgacgc ttggtattgc agagaagatt ttataagaat tttgcttttag agaatgccac 1560
tttggtgaa ctacaagtgt aggccacccat tataatttat aaatacagca tacttcaaaa 1620
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gcttgacaga ctcaagagaa actaccagc tattacacaa gccaaaatgg gagcaaggcc 1740
ttctctccag actatcgtaa cctgggtgct taccaagttg tgcttttctg ttttcaagt 1800
taaagtatgt tgagcagaat gttgtacttg aaaatgctat aagtgagat gtatgaaata 1860
aattctgact tatgaaaaaa aaaaaaaaaa agtcgacgcg gccgganatt tagtagtag 1919

<210> 304

<211> 157

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (112)

<223> n equals a,t,g, or c

<400> 304

agggtgtacac cctgcccagc cacaagccga tttttaaaag gtcaaagtgt atgacagcca 60
ttttacagga aaaaaaaaaa ttgtatagtt gtgggtgacgt tcctcacaca gngcaccagc 120
ttcagggagt ctgtcccttg cagacccctg aaccggg 157

<210> 305

<211> 343

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (270)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (291)

<223> n equals a,t,g, or c

<400> 305

```
aatgcagtgt tttcgattac tgatctctca ttacccaact atctgatggc atcttcgggtt 60
ggactgcttc ctaccagct tctgaattct tacttgggta ccacctgcg gacaatggaa 120
gatgtcattg cagaacagag tkttagtggg tattttgttt ttgtttaca gattattata 180
agtataggcc tcatgtttta tgtagttcat cgagctcaag tggaattgaa tgcagctatt 240
gtagcttggtg aaatgggaac tggaaatctn ctctgggttaa aaggcaatca nccaaatacc 300
agtgggctct ttcattctac aacaagagga ccctaacatt ttt 343
```

<210> 306

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (585)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (661)

<223> n equals a,t,g, or c

<400> 306

```
gaagcaggca ggttgctcag ctgcccccg agcggttcct ccacctgagg cagactccac 60
gtcggctggc atgagccggc gccctgcag ctgcgcccta cggccacccc gctgctcctg 120
cagcgccagc cccagcgag tgacagccgc cgggcgccct cgacctcgg atagttgtaa 180
agaagaaagt tctacccttt ctgtcaaaat gaagtgtgat ttttaattgta accatgttca 240
```



```
ttccggactt aaactggtaa aacctgatga cattggaaga ctagtttcct acaccctgc 300
atatttggaa ggttcctgta aagactgcat taaagactat gaaaggctgt catgtattgg 360
gtcaccgatt gtgagcccta ggattgtaga acttgaaact gaaagcaagc gcttgcataa 420
caaggaaaat caacatgtgc aacagacact taatagtaca aatgaaatag aagcactaga 480
gaccagtaga ctttatgaag acagtgctat tcctcaattt ctctacaaag tggcctcagt 540
gaccatgaag aangtagcct tctggaggag aaattcgggtg acagnctaca atnctggctg 600
gttacaaatc caaggcccag acccaatatt cccaacaaaa aacttttgnt tggccagggtc 660
nttcaatttt tgaaaaaaag tgggttttgg tttaac 696
```

<210> 307

<211> 396

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (394)

<223> n equals a,t,g, or c

<400> 307

```
cctaggcctc ccaaaatggt gggattacag gcgtgaggca ccgcacccaa cctaacagag 60
gaaacacttc aaatgcacat cctcacattt ctagtctacg tagctggaaa aaaaggacat 120
tyttaatatg ctaatgtgga ggtcacctag ttaccctaag ggagaaaagc aaggcaagga 180
cccactgcac agcaagttcc cccttggaag ccacgggcg cactgcccac aaatgcacat 240
aatctctgca gaaatacaaa agccctaatt ctggctgcac tggggacaca ggtaggagga 300
aattttcccc tgtaagcagt tttgaattct gaactatgtg gacagamcac caattttaaa 360
acaatgaaag tgagttgggt gggcacatgg tttngc 396
```

<210> 308

<211> 549

<212> DNA

<213> Homo sapiens

<400> 308

```
agagacaggg ggcaagaagg ggtgtmaggg cccagtraca aaatcattgg ggtttgtagt 60
cccaacttgc tgctgtcacc accaaactca atcatttttt tcccttgtaa atgccccctcc 120
cccagctgct gccttcatat tgaagggttt tgagttttgt ttttggctct aatttttctc 180
cccgttccct ttttgtttct tcgttttggt tttctaccgt ccttgtcata actttgtggt 240
ggagggaacc tgtttcacta tggcctcctt tgcccaagtt gaaacagggg cccatcatca 300
tgtctgtttc cagaacagtg ccttggtcat cccacatccc cggaccccg cctgggacccc 360
caagctgtgt cctatgaagg ggtgtggggg gaggtagtga aaaggcggt agttggtggt 420
ggaaccaga aacggacgcc ggtgcttggg ggggttctta aattatatat aaaaaagtaa 480
ctttttgtat aaataaaaga aaatgggacg tgwaaaaaaa aaaaaaaa aaaaactcga 540
gactagttc 549
```

<210> 309

<211> 1778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (1704)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (1744)
 <223> n equals a,t,g, or c

<400> 309

```

ctgtcttggc cttccagggt gctgggatta caggcgtgag ccactggaac ctggccttgt 60
tttgccttat tttttctctt acatgaagta aagcgctttg gtcaaacaca caaaaatact 120
gccttgtagt ggtgggttgg ttcatagtg gatcacacac agtggtctac ttggcttgta 180
aaatggtgcc ttggataggg tgagtttgga taagtatgta tgtatgtatg agttatagca 240
aaattaagta gattgaatca agtccatgca aaagcaataa aacagtttta attttttaaat 300
tttttaaaaa ttaaaacttt aataaaacag tttttaattt tttgctaggt tcttttaaaa 360
aatgatgtaa cttacatgga agtcttcaca ggactttttt ctttcctgga actattgaaa 420
tgtaatttag gatgatttga tcttccatct caagtgtgca acatggctgt gtcatctctg 480
cttaccatag ttttatttaa caaaattcta gtcaagggat aagggcataa tgaagacaag 540
cttcagttat gaaagtacaa actatttgtg tgattaattt ttaaaaatga cattaagaag 600
cccattgtaa aataatattt gcagtcaaat ggtttttctt gctgtaagtc ctgttgtagc 660
tatgttttag gtagtggttc tcatctacct tggagtgcac aagacttacc tagcaggctt 720
gtttaaaaag ttcagattcc tagctttgta cccagggtt gcctcagggt gtatgggctg 780
tggtcctgga gtcacactt ttataaatag tgggtcagag accacagaga gagactgctt 840
catcgaatgg gaagtaccaa ggagaaagta caattcagta ttgtctggag gcaagtggac 900
actttgtacc tgaggtttag aatagggtgt ctcttgccag tacaatcccc aggcgttttc 960
tgtgttcaga agtagtaaga atgcctttta ttccagaggat tatctaagct ctttaaagct 1020
gtttttctcc attgtcatag tgccttctct gaaaaatgaa tgtacaggta tcctattttc 1080
taatgtaatt aggtattttt aaaagcaatt tttgatagtt tttcttttaa aaagtaaaat 1140
tcagcactgt gacttgaacc cccaaatctt tcacatacag gtgaaacatt aagccacaaa 1200
taaaaaaat gaacaagaaa gaagacaaga tcctaattcc tgtcattagt gacctaaagta 1260
ccccatatca gaaactttgc aaaacagatc tagggacaga agggctttga aagacatttt 1320
tctttggggc aaatttcgtg tgccagaact acagttttaa tgtttttatg agcaagggaa 1380
ggtagcattg attcccatag ctttcttaatt agatacatgc tgtcatggat gtaagcctta 1440
aaggagttaa tactaatctt gtacatacac aaattttcct cagggtttttt ttttttaaaa 1500
aatgatttgt taaaagtact gtctgctaga cccttgccct tgagtggctt tgaaacttaa 1560
tatagttttt aaaaagtgca atgggatgag attatgctat tagtatatta aaagcatgtt 1620
tctgttttac tccaatttgt aagatcattt aatggaataa agatcacac accaaaaaaa 1680
aaaaaaaaag gcgggcccgt ctanaagatc caagcttacg tacgcgttgc atgcgacgtc 1740
atanctcttc tatagtgtca cttaaattcaa ttcactgg 1778

```

<210> 310
 <211> 771
 <212> DNA
 <213> Homo sapiens

<400> 310

```

attaatttaa aaagcccccc aatctgtggt attttattat ggcagcccta gcaagcta 60
acagtgggtt gagaggctgg gaggggtgag gggaagataa acttttaaaa agctcttatt 120
tttcatttca atcagttaaa aatacttgct cagtgttaaca attttgcttc tcagcttcca 180
ctctaataatt gttgtgccat taagcaattt agctaattct gacatttctt agattcataa 240

```

```
tgttaggagc atttaatctg tattttacaa gttaggaagc agaggatcag agatgggaaa 300
ggactagccc aaggccaaca ttaacaagcc ctctaacaaa aactttacaa tacatttatg 360
ttgaatggaa ctccaagatc tcacctctcc atccaggaat ggagtccatg taatcaaagt 420
gaacttaaaa ataggacagt ttcaacaagt caggagattc acagcaactg atcaaaggga 480
gtccagtcaa cgtgagcaag cgtgattatg atgaggaagc cccctctgct ttaatccaca 540
caaggaacgt aacctgaagt aacctgatgt taaccaatct gctgtgtcta ctatgctgtt 600
tccttggtcc tgctagtgtc gctttacaaa tgcagaccat tctatcatac ctggcrgggc 660
ttctgtttta tttttagggc tggatgctac ccagttcatg aatcgctaataaaaagccaat 720
tagatcttta taaaaaaaaa aaaaaaaaaat tactgcggcc gacaagggaat 771
```

<210> 311

<211> 1419

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (26)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1005)

<223> n equals a,t,g, or c

<400> 311

```
tcttgaaaac ccgggtcgac nggaacnctc cgcgaaggcc agcccttcga atactttgtt 60
tatggagctg cctgttccga ggttgaaata gactgcctga cgggggatca taagaacatc 120
agaacagaca ttgtcatgga tggttggtgc agtataaatc cagccattga cataggccag 180
attgaagggtg catttattca aggcattgga ctttatacaa tagaggaact gaattattct 240
ccccagggca ttctgcacac tcgttggtcca gaccaatata aaatccctgc catctgtgac 300
atgcccacgg agttgcacat tgctttgttg cctcctctc aaaactcaaa tactctttat 360
tcatctaagg gtctgggaga gtcgggggtg ttcttggggt gttccgtgtt tttcgctatc 420
catgacgcag tgagtgcagc acgacaggag agaggcctgc atggaccctt gacccttaat 480
agtccactga ccccgagaa gattaggatg gcctgtgaag acaagttcac aaaaatgatt 540
ccgagagatg aacctggatc ctacgttcct tggaatgtac ccatctgaat caaatgcaaa 600
cttctggaga aaacagagtg cctcttccca gatggcaatc tgtcctatct ctgtgctgga 660
agatgctaga tctgaaagac agagtttcca cagttcagaa atcatccac agtggtgtt 720
ttctatggag ctgatttaaa gtattccatt tagatttgat agatatgctt aagcaatcta 780
taaatcattt tcaatgttat aaacactaat tggtttcctc tagggtgata ttcgtcatta 840
ctctgtctct tcaatccatc cagctaaatg gaatagggtg tgacttgcat gtgactccta 900
cttggttct atccaccaac agaaattata ccatatagtg aaaggcaatt ttctaaataa 960
tttcattact aatatgaact gtgaagttgt cattttttca tttgnccttt tctgctatca 1020
ccttctctt gtcagaatga atatagacac tgtatctaag tgggacccaaa gaaaaaatag 1080
cgaactttca ccaaagtttt catgaaaacc caaagcttt aaaagktact atcaagaaat 1140
tgaaaggaaa cccacagaat aggataaaat atttgtaaat catatatattg ataaaagtct 1200
```

```

tgtaaccaga tacataaaga gctcttacaa ctcaataaaa ggcaagtaat ttaaaaatag 1260
gcaaaagaat tgctggatgg tatggtagtt ctatttttag tttttaccct aactactctg 1320
acttgatcat ttaacattct gtgtatgtaa caaaatatca catgcataaa tattatgtat 1380
caataaaatt ttttaatggg caaaaaaaaaa aaaaaaaaaa 1419

```

<210> 312

<211> 526

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (525)

<223> n equals a,t,g, or c

<400> 312

```

gggaagttca aagggaatth ttttattggt tagcttggtt ttaggttgca gtaaatctct 60
taggtcatcc agcaggatta ggaagagaag cattgtgaga aacagggttt gggttttgct 120
gaaatttgct tgctcagcatt gcatcacttt tccttaactg ttctctaagt actgatgtct 180
ttcaaattga ctcaagakcat actccttatac tttgagcaga atattttgaa cagaaaawta 240
agccattttc atttatatac ctaattcaat aggtttataa ataaaagggc aaatcctcac 300
gaataatata gtacagtga aaattgctct ccccttagga actgaggaat agaaaaacaa 360
tttctcttta cattgtttat agtaggtagc ccttgaaaag aaaatcactt atccctgcca 420
cccccatggt cctcataaca agttagggaa actgaaattg ctggaaattt aggattctwa 480
ggcamcaggc wgggaaatag ggtcctcata cctgaccttt ttctnc 526

```

<210> 313

<211> 2435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (15)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2408)

<223> n equals a,t,g, or c

<400> 313

```

ggcacgagcg cgaangacac ggcttgggcg ccgactgcag agccgggagg ctggtggtca 60
tgccgggggt cctggttcgc atcctccttc tgctgctggt tctgctgctt ctgggcccta 120
cgcgcggtt gcgcaatgcc acccagagga tgtttgaaat tgactatagc cgggactcct 180
tcctcaagga tggccagcca ttctgctaca tctcaggaag cattcactac tcccgtgtgc 240
cccgttcta ctggaaggac cggctgctga agatgaagat ggctgggctg aacgccatcc 300
agacgtatgt gccctggaac ttcatgagc cctggccagg acagtaccag ttttctgagg 360
accatgatgt ggaatatttt ctctggctgg ctcatgagct gggactgctg gttatcctga 420
ggcccgggcc ctacatctgt gcagagtggg aaatgggagg attacctgct tggctgctag 480
agaaagagtc tattcttctc cgctcctccg acccagatta cctggcagct gtggacaagt 540

```

```
ggttgggagt ccttctgccc aagatgaagc ctctcctcta tcagaatgga gggccagtta 600
taacagtgca ggttgaaaat gaatatggca gctactttgc ctgtgatttt gactacctgc 660
gcttcctgca gaagcgcttt cgccaccatc tgggggatga tgtggttctg tttaccactg 720
atggagcaca taaaacattc ctgaaatgtg gggccctgca gggcctctac accacggtgg 780
actttggaac aggcagcaac atcacagatg ctttcctaag ccagaggaag tgtgagccca 840
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actccacaat caagaccgaa gcagtggctt cctccctcta tgatatactt gcccgtgggg 960
cgagtgtgaa cttgtacatg tttatagggt ggaccaatth tgcctatttg aatggggcca 1020
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gggacctcac tgagaagtat tttgctctgc gaaacatcat ccagaagttt gaaaaagtac 1140
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tttatccctt gacatttata cagggtgaaac agcattatgg gtttgtgctg taccggacaa 1320
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atcgagcata tgttgctgtg gatgggatcc cccaggaggt ccttgagcga aacaatgtga 1440
tactctgaa cataacaggg aaagctggag ccactctgga ccttctggtg gagaacatgg 1500
gacgtgtgaa ctatggtgca tatatcaacg attttaaggg tttggtttct aacctgactc 1560
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gcagscacct ggggggctgg ggacaccgtg acagtggcca ccatgatgaa gcctggggccc 1680
acaactcatc caactacacg ctcccggcct tttatatggg gaacttctcc attcccagtg 1740
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tgtttgtgcc ccagcacatc ctgatgacct cggcccaaaa caccatcacc gtgctggaac 1920
tggagtgggc accctgcagc agtgatgatc cagaactatg tgctgtgacg ttcgtggaca 1980
ggccagttat tggctcatct gtgacctacg atcatccctc caaacctgtt gaaaaaagac 2040
tcatgcccc acccccgcaa aaaaacaaag attcatggct ggaccatgta tgatgatgaa 2100
agcctgtgtc tttgagggat tctaccctga acatacctca cagatccctc ctgtcatgcc 2160
acatttcact gattggaatg tggaaatgga aaaggaatth aggatgtgca ttttcacctg 2220
aggtttccct gcatccctgc agtgccaaag cccacacctc agggaccacc tggaatgtgt 2280
gaggggctga cagcacagta acgtgcatac atatctgcag ggctggaatg gaagctttta 2340
agggtgtagt gatttttatt ttggaagaat catgttacct ttttgttaaa taaaatttgt 2400
actcaanaa aaaaaaaaaa aaaaaaaaaa aaaaaa 2435
```

<210> 314

<211> 2543

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2538)

<223> n equals a,t,g, or c

<400> 314

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ctccgttggg aacttgggct gagtaccgcg gcgggcgcg gcraggcgcc ctagacatct 60
tctccctccc ttgcctcaga tttattgcta aacatgggtg catttttggg taaacccaaa 120
actgaaaaac ataatgctca tgggtgctggg aatggttttac gttatggcct gagcagcatg 180
caaggatgga gagtggaat ggaagatgca cacacagctg ttgtaggtat tcctcacggc 240
ttggaagact ggtcattttt tgcagtttat gatggctcat ctggatcccg agtggcaaat 300
tactgctcaa cacatttatt agaacacatc actactaacg aagactttag ggcagctgga 360
aatcaggat ctgctcttga gctttcagtg gaaaatgtta agaatggtat cagaactgga 420
```

tttttgaaaa ttgatgaata catgcgtaac ttttcagacc tcagaaacgg gatggacagg 480
agtgggtcaa ctgcagtggg agttatgatt tcacctaaagc atatctactt tatcaactgt 540
ggtgattcac gtgctgttct gtataggaat ggacaagtct gcttttctac ccaggatcac 600
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<210> 315

<211> 828

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (828)

<223> n equals a,t,g, or c

<400> 315

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cgtgaagtac tacaccctag aggagattca gaagcacaa cacagcaaga gcacctggct 180

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gatcctgcac cacaaggtgt acgatttgac caaatttctg gaagagcatc ctggtgggga 240
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<210> 316

<211> 1608

<212> DNA

<213> Homo sapiens

<400> 316

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tggtgtgac caggtgacct tgagcatgct tcctttggtg aggagagcac ggggaagaat 660
tgtcaatgtc tccagcattc tggaagagt tgctttcttt gtaggaggct actgtgtctc 720
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<210> 317

<211> 1057

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (958)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (966)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1035)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1053)
<223> n equals a,t,g, or c

<400> 317
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actcttaaag taatctctct tgggcagagg ccttattgca ccagaggga aaagtatata 180
cttcatttgc tgttactcca gttatgcctt aaattcattt gcttggtaat cctatcaacg 240
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gttgctcattt agacagttac tgattcgatc tgctttatat atgagaacgt atttttaact 420
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aactgtaagt tctaggtaga ctaattggga gcagacacgg agtttttagat gccttagcca 540
aaccacagcag aaacctttca cacagccact catcgtaaga aacgcagatt tttctcttct 600
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gccgtcttcc ttctggctta gcaggtgctg cagctgtact ctcgactcct gtctgtgnag 960
cgtganyagg gaaaatgagg agtggagtct atttccaaaa aaaaatgtgg atggagtttt 1020
ttccttaaag tggcnttcat tggcccaatt cntttt 1057

<210> 318
<211> 1336
<212> DNA
<213> Homo sapiens

<400> 318
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tatagagatt tgaaactgga caatgtatta ctggactctg aaggccacat taaactcact 180
gactacggca tgtgtaagga aggattacgg ccaggagata caaccagcac tttctgtggt 240
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tggtgggctc ttggagtgct catgtttgag atgatggcag gaaggtctcc atttgatatt 360
gttgggagct ccgataaccc tgaccagaac acagaggatt atctcttcca agttattttg 420
gaaaaacaaa ttgcataacc acgttctctg tctgtaaaag ctgcaagtgt tctgaagagt 480
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<210> 319

<211> 496

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (433)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (439)

<223> n equals a,t,g, or c

<400> 319

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atcgagcatt gatcaatgct caaatgctga acaattcagg attcgctagg ggaattattg 120
aagagttcca aaataataat gaccttgagt tacaacaaaa atgtattaat gtactaagca 180
catatgctat gattcaggga caaattgatg caaataagga gattgggcag ttcttcatac 240
aaactttaac acagttgaat gttcgccctg aaattttgat agaaatgaca aattcgcttt 300
tccaatttac ggggatgcct cttacggcta taatggaacc atwtttgtaa ggggtgggtt 360
tttatcyatt ctaaargacc cagttgtacc caatttgrgg cmgcmattcc aaatgggtgg 420
ttaaaaccaa atncccganc twaargaagk tgccctgggt gctttactac gttgggtagt 480
ttcatcacta caaatg 496

<210> 320

<211> 1756

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1718)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1721)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1733)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1750)

<223> n equals a,t,g, or c

<400> 320

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ccaccgagat cgagtcgcta tgcatagaact gttactgcaa tggcatgacg cgcctcctgc 240
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gctggaacaa cacggagatc cagtcggcag gcaggatcca ggaccaggga gtgcgctaca 360
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1756

<210> 321
<211> 588
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (512)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (543)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (567)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (574)
<223> n equals a,t,g, or c

<400> 321
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tagtcccagc tactcaggag gcttgggtgg gaggattgcc tgagaccagg aggttgaggc 180
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<210> 322
<211> 738
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (10)
<223> n equals a,t,g, or c

<220>
<221> misc feature
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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (19)

<223> n equals a,t,g, or c

<400> 322

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atcaggccca tttgtctccc ctgcaccgag ggaacaactc gagctttgag gcttcctcca 180
actaccactt gccagcaaca aaaggaagag ctgctccctg cacaggatat caaagctctg 240
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cccaatactt gcagaggtga ttctggcggc cccttgatag ttcacaagag aagtcgtttc 480
attcaagttg gtgtaatcag ctggggagta gtggatgtct gcaaaaacca gaagcggcaa 540
aagcaggtag ctgtcacgcc cgagactttc acatcaacct ctttcaagtg ctgccctggc 600
tgaaggagaa actccaagat gaggatttgg gttttctata aggggtttcc tgctggacag 660
gggcgtggga ttgaattaaa acagctgcga caacaaaaaa aaaaaaaaaa aaaaaaaaaa 720
aaaaaaaaag gggggggg                                     738
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<210> 323

<211> 876

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (759)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (761)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (786)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (798)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (857)
<223> n equals a,t,g, or c

<400> 323
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ggctttgcaa attggcagcc caagtytcag gggcctgtgc agtgactgat cattaccaac 180
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accccgata tacagcagca aacaaagcag ccatggtacc ttcctcagg gagcagtcag 600
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<210> 324
<211> 1322
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (47)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1309)
<223> n equals a,t,g, or c

<400> 324
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agattataacc aaaatagaga aaattggaga aggtacctat ggagtttgtt ataagggtag 180
acacaaaact acagggtcaag tggtagccat gaaaaaaatc agactagaaa gtgaagagga 240
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ttcacttggt aagagttatt tataccaaat cctacagggg attgtgtttt gtcactctag 480

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aagagttctt cacagagact taaaacctca aaatctcttg attgatgaca aaggaacaat 540
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<210> 325

<211> 342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (64)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (71)

<223> n equals a,t,g, or c

<400> 325

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gagnacaggg ncctgacccg agtggtggcc agactctcgg agtccatcga gtcctcggac 120
accagggagc tctagttctk gcccctactc tccaactcac ttccctcctc cactactcca 180
ggcaggttca gtcttcttgt tagtcccaga agctctgtgc tcatccccctc catccgagcc 240
tccatattgca ggttcctgca aagcttgggtt atctgcagat ggaagcagcc aggactgaga 300
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```

<210> 326

<211> 3690

<212> DNA

<213> Homo sapiens

<400> 326

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tgcggtcgaa gaaggggacg ccgacaagag ttgaagtatt gataacacca aggaactcta 180
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gcgtccaatg cgaatttttg tgaatgatga ccgccatgtg atggcaaagc attcttccgt 300
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cgctcaaagc tgtgtccgac tggatagacg agcaggaaaa gggtagcagc gagcaggcag 420
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caaccgccct cctggacaag gtggccgaca acctggccat ccagcttgct gctgtaacag 660
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<210> 327

<211> 719

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (446)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (701)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (709)

<223> n equals a,t,g, or c

<400> 327

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tgtcaacgtc cactagctgc ccgatteccg ggggccggga ccagctgcc gactgctaca 120
gcaccacgcc ggggggcacg ctatacgcca ctacccccgg aggcaccagg atcatctacg 180
accgaaagtt cctgctggag tgcaagaact caccattgc ccggacaccc ccctgctgcc 240
tccctcagat tcccggggtc acaactcctc caacagcccc tctctccaag ctggaggagc 300
tgaaggagca ggagacagag gaagagatac ccgatgacgc acaatttgaa atggacatct 360
aatccagtgc agatgacctg gcatgtggag ttacagaggg atccctcatg ccactgctgc 420
caccacctct tcctggggca tccaanagcc agctggcctc atctaactctg gaagggagtg 480
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aacttgccaa gcccttaact ctacttcctc ttcagtctgt ggtactcctc ctaaccctaa 600
accctctatg ctcagggggt ggaactgggg aatggagtaa gtcaccttct gactgcttag 660
taaacattca aagaaaaaaa aaaaaaaaaa aaaaaaacct ngggggggnc cccgtaccc 719

<210> 328

<211> 989

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (176)

<223> n equals a,t,g, or c

<220>

<221> misc feature
 <222> (943)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (968)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (982)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (984)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (986)
 <223> n equals a,t,g, or c

<400> 328
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 agtgactgca gggaaagctgg cacgggcacc ggccgaccct gggaaagccg ggggtccccg 120
 agttgcagct cccggagctc cggcgggcggc tccaccggcg aaagagatcc cggagntcct 180
 agtggaccca cgcagccggc ggcgctatgt gcggggccgc tttttgggca agggcggtt 240
 tgccaagtgc ttcgagatct cggacgcgga caccaaggag gtgttcgcgg gcaagattgt 300
 gcctaagtct ctgctgctca agccgcacca gagggagaag atgtccatgg aaatatccat 360
 tcaccgcagc ctgcgccacc agcacgtcgt aggattccac ggctttttcg aggacaacga 420
 cttcgtgttc gtggtgttgg agctctgccg ccggaggtct ctcttgagc tgcacaagag 480
 gaggaaagcc ctgactgagc ctgaggcccg atactaccta cggcaaattg tgcttggtctg 540
 ccagtacctg caccgaaacc gagttattca tcgagacctc aagctgggca accttttctt 600
 gaatgaagat ctggaggtga aaatagggga ttttgactg gcaaccaaag tcgaatatga 660
 cggggagagg aagaagaccc tgtgtgggac tcctaattac atagctcccg aggtgctgag 720
 caagaaaggg cacagtttcg aggtggatgt gtggtccatt ggggtgtatca tgtatacctt 780
 gttagtgggc aaaccacctt ttgagacttc ttgcctaaaa gagacctacc tccggatcaa 840
 gaagaatgaa tacagtattc ccaagcacat caaccccggtg gccgcctccc tcatccagaa 900
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 tctttcgncc caaaaaaaaa angngnatt 989

<210> 329
 <211> 434
 <212> DNA
 <213> Homo sapiens

<400> 329
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 atgctaaaata aagtacttca aactaggaat gtaaacctta taaagaagac tgtattaagg 120

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atgcccctgc atactattat tccgttggtta caagagctta caaagagggtt acaaggacat 180
cctaatagtg ctgtgctaata ggttcagtgg ctaaaatgtg tggttaacagt tcatgcatca 240
tacctgtcca cgttgccetga cctggtaccc cagctgggga cactctacca gttaatggaa 300
agcagagtca aaacttttca gaaactttca caccttcatg gaaagcttat tcttctaatt 360
acacaagtaa cagcatcaga gaagacaaag ggagcaactt cccctggaca gaaggcaaag 420
ttggtgtatg aagt                                     434

```

<210> 330

<211> 696

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (643)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (657)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (685)

<223> n equals a,t,g, or c

<400> 330

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ttaaccctgc agtccaccaa cacgcacacg cagagcagca gctccagctc tracggaggc 120
ctcttccgct cccggcccgcc ccactcgctc ccgcctggcg aggacggctg tggtgagccc 180
tatgtggact ttgctgagtt ttaccgcctc tggagcgtgg accatggcga gcagagcgtg 240
gtgacagcac cgtaggcagc cggagaatgc agcccaagca gggcctggca tggggcagga 300
caggggtccag ccttttcccta acatctgcct gtgccacaac ggccagcagg tgccccatcc 360
tctgcccaca gearactctg tcccatggct ctccgggcag tagagtgtgt gagtgcagac 420
tggacctgtg gttcatacct tgtcaccacc cgggaagctg aaggccactt yctcccagat 480
ggcctcagca ggaccatcgm cctttctcag agcagagggc caggtataga aaccgcagtg 540
ggcctgcaag ccgcccaggs ctycccagca gcctcctaca gagcaggaag agggcgccct 600
gttgaaccct gagtgtttgc aggccagca gaccctgctg ttnccaagcg caccctngct 660
ttcgaacatt aacttcctta acttngggac agtagg                                     696

```

<210> 331

<211> 541

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (532)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 331

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ccacggtgtc ttctaccacc tggccaagag gctcacgggg atcacgtacc tccgtgtccg 60
cagcctgccc ggagaggacc tgagggcccg tkttagctac aggctgctgg gggtcattctc 120
actgctgcac ctggtgctgt ccatggggct gcagctgtac ggtttcaggc agcggcasga 180
ngccaggaag gagtggaggc tgcaccgcgg cctgtytcac cgcaggcctc cttggaggag 240
agagccgttt ccagaaaccc cctgtgcamc ctgtgcctgg aggagcgag gcacccaaca 300
gccacgccct gcggccamct gttctgctgg gagtgcattca mcgctgtgtg cagcagcaag 360
gcggagtgtc ccctcctgcc gggagaaagt tccctcccca gaaagctcat ctaccttcgg 420
cactaccgct tgaaccggcg cccgggttg gccttggaaca caaattgaac tctacgggaa 480
ttctgaaacg cccaagattt attctccagg atttaacctt gcttgccaaa antttaaaac 540
n 541
```

<210> 332

<211> 305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<400> 332

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ggnacggaaa agcgcgagaa gcggctcggg tcccaccacg gagaggcggg agtnagtcaa 60
ctgacaagcg ctggggacag tggcgctcctt gtcttgccct tgcgctccc gcccgcctct 120
tccctggctg ggctggcggg gcccttgctg atgaacctga ctgagggtcc cctggcgatg 180
gcagaaatgg accctacaca gggccgtgtg gtctttgagg acgtggccat atatttctcc 240
aggaggagtg ggggcacttg atgaggtcag agattgctgt accgtgatgt gatgcttgag 300
aattt 305
```

<210> 333

<211> 445

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (14)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (409)
<223> n equals a,t,g, or c

<400> 333
ggtttgccaa aaantgtttg tacctctggg ccatattgca gaaccctgcc cttctttggt 60
gactgaggaa agctcgctcc ctgcccaggt ttttcattgt tgatcgaaat taacaccagg 120
tggtgaatag agcccctset aagggttgctc aggataaatc atttattaaa taggtctgct 180
tatcaggagg ggcgtgaagg ctcccaaaag gaaatgctgg cacctgggcc cagaagccag 240
ggccttytaa ctccctgggt tgatttcttc agtgaagttg caccctacaa agggaatatg 300
gccmaagcgg gcacttcaac tggaaggctg rtatcaggcg rttagacagc catggcattt 360
ctggcggtta gtctgggaat ggggttggtg aggaggtggg acttatatng agggacttac 420
cagttccccg tttggatttt ggatg 445

<210> 334
<211> 317
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (100)
<223> n equals a,t,g, or c

<400> 334
gaaatcttgt ctggttgaga agcaattttt ttcaactttg taacagagac ttgacatttt 60
taaattttta aagatgatgg actagactca agtatttttn aggactgtcc caatcataag 120
tctgaaggat ttcagtgtt atcataacat ttgacatata gttggcactt ggtaggtact 180
gaatcaatga ataggagtta ttggttgctt attcagaggc ttgtgggagt tgatcatcccc 240
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agtccccctg agggact 317

<210> 335
<211> 1524
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1440)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1441)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1511)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1523)

<223> n equals a,t,g, or c

<400> 335

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tctccccgggc tgcaggaatt cggcacagaa ctgccgactc atcttttcaa aagcaaaacc 60
atctgtatta gccttgtagc ttctcaattt ggaagtggaa actttgaaat ctgttgaatt 120
actggaaatt ctcttgctag ttaaaaaaca ttccaagatt aatgacactg agttcttcta 180
ctggagagag ttggtttcta aatgcctagc cgagtattct tctcctgaat gttgcaaacc 240
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ctactatagt gttcctgagc tgccaacgat acctgagggg ggttggtttg atgaaagtga 360
aagtgaggac tcttgtagaag atatgagttg tggagaggag agtctcagca gctctcctcc 420
cagtgatcaa gagtgcacct tctttttcaa cttcaaagtg gcacaaacac tgtgctttcc 480
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ggggaatagg tagtttcctg gtttagcccc catctagtca ggaattaata tactggaata 600
cctaccttct atttgttatt cagatcagat ctggcctatt ttcataattta tcctaagcca 660
tcaaattggg tagtgcctct taaaccatta acagtacttt agacattggc actttatttt 720
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gtgccaagat tgaatatgaa gaacccgagt gttgagatat agtttaagca atctggtggn 1440
ntcagctaga tgggctatta cttgaatgag attgcaggat ttacttataa tgttactgaa 1500
cttaagctaa ntgtttactg ggna 1524
```

<210> 336

<211> 306

<212> DNA

<213> Homo sapiens

<400> 336

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ttttctctc agagccttat tagcaattgg caatcttaaa atttcatctc ctaagcaggg 120
tccttatcag atattccttg acccccttat gttaagtgtc ttagccactc attgttaagc 180
caactgctaa aatcttagaa aaatatttca gccttctcct accccatccc ccacccccac 240
aagcttctag cttcttctac ctacagcaaa tgttaaaact ggtcagaagt tatattattt 300
actctg 306
```

<210> 337

<211> 291

<212> DNA

<213> Homo sapiens

<400> 337

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acctacctgg cctcaagaga aattattttc cagggcccaa cacattggtg ttttatcagc 120
acctaattga cctggggaaa gcagaatgcc taactccagc ctgtggtatt ttgttatggc 180
aggctgagca gactaataca gactttaata tacagactaa aagtaaaggg atggagaaaag 240
atacccttag tcaaaataaa gaaagtagtt atgttaatct aagacagagc t 291
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<210> 338

<211> 1264

<212> DNA

<213> Homo sapiens

<400> 338

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<210> 339

<211> 759

<212> DNA

<213> Homo sapiens

<400> 339

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gttggtgccta agacggccga gaactttagg cagttctgca ccggagaatt caggaaagat 180
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ggggttccaa taggatacaa aggaagcacc ttccacaggg tcataaagga tttcatgatt 240
caggggtggag attttgttaa tggagatggt actggagtcg ccagtattta ccgggggcca 300
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tgagtaagat aatctggact ggcccccgtc tttgcttccc tgctgctgc tgccccattt 660
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ctgtaaataa agtttttttg tatgcgtaaa aaaaaaaaaa 759

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<210> 340

<211> 2639

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (37)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (52)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1651)

<223> n equals a,t,g, or c

<400> 340

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cattgtggat ttcattctat atctgtggac catcctagtt tattctccca taagtcttag 480
aagctttatg gtgattatgt tgagggtttc attctcgcat aaagcacaat gctgtcttca 540
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gtgatataatt taagtgtact ggatctggaa tgggtgtttt gtttgggggg aatytttttt 720
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gcctgtcaca taagttaaac tatttaattt gttttgaatg ttttgattg ctacacaata 1080
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<210> 341

<211> 1824

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1807)

<223> n equals a,t,g, or c

<400> 341

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ttaagtttgt ttatgtttga taaagaacac aatataaata caattttaag tctttgtaag 180
tgtttatgtt ggtataaatc tctgtgcatt gcttaaagtt tagaaataat agtagtttaa 240
aatacagagg tgccagccaa gccatactta ctcttcaggt tgctattggc caccctgaat 300
gatgaatcta aagaagtatc attgtgaaca agggaaatgt cagtcaagaa atattccttg 360
gaatataaaa caaagccttg actctgctgg cataggtctg agttttcata aactggagct 420
tcacaaatct gtaaaactca taatattaat gggtgctttt tcagaaatta tagaatagct 480
gccacctctt ctaaattaag cattgactgt catcagtatt agatttagcc agatagtata 540
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ggcggtnccg tcgcgatcta gaac 1824
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<210> 342

<211> 4531

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (30)

<223> n equals a,t,g, or c

<400> 342

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cctactttga atgccgtgaa aagaagacag aaaactccaa attaaggaag gtgaaatatg 420
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gttttacatt cctttttaac ccattcagtg gagaatgtca gcttttctcc caagttgtat 4440
gttaagtcta ttctaatatg tactcaacat caagttataa acatgtaata aacatggaaa 4500
taaagtttag ctctattaaa aaaaaaaaaa a 4531

<210> 343

<211> 584

<212> DNA

<213> Homo sapiens

<400> 343

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cccagagagc aaggtggctg aactatagtc tgggaagccct caggtaaaga ggcacatctc 180
accactcatt ggttaaaca tgcacatag cgagcacttt tcctttccct ggagaatggg 240
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tgttgaagta aaaaaaaaaa aaaaaaaaaa aaaaaaaa aaaa 584

<210> 344

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<400> 344

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gcctcagcct cccaacgtgc tgggattaca ggtgtgagcc accgtacctg gyagaaaatg 180
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gaatgggaat gtgcagtgtc ttatgtttgg ggagttggag cagggtatct tttcatcaat 720
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<210> 345

<211> 3740

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (223)

<223> n equals a,t,g, or c

<400> 345

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ggtaggctgg cctgggctgc gaccggcggc tacgactatt ctttgcccg gtcgggtgcga 180
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<211> 446

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (408)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (442)

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<400> 346

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<210> 347

<211> 782

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 347

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ta 782

<210> 348

<211> 439

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (175)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (369)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (420)

<223> n equals a,t,g, or c

<400> 348

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<210> 349

<211> 2356

<212> DNA

<213> Homo sapiens

<400> 349

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<210> 350

<211> 1219

<212> DNA

<213> Homo sapiens

<400> 350

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<210> 351

<211> 408

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (392)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (397)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (405)

<223> n equals a,t,g, or c

<400> 351

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<210> 352

<211> 1283

<212> DNA

<213> Homo sapiens

<400> 352

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<210> 353

<211> 3229

<212> DNA

<213> Homo sapiens

<400> 353

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tggtaaaaat tcaaaaggca ctctgtgagt agagagtatc atttaagctt attttagtca 2760
catgtagtat atatctcctt aaagctgtca ctctcacttt cttaccattc tcttgatttc 2820
```

```
ttcagaaacc atctagtcac catctttata ctctacctgc ttctgcaatt atatatcata 2880
ttatgttttc agagcagttc attgtcaagt tggactttta gtgaccattc aagaaaagat 2940
gaaatctcac gaacctcaaa acttcattca tgtcttttta caaatgagaa aaaaaaatgc 3000
attaaagatt aatactcaat ttgattatat cttgggttct gttttttaat gagtggttcta 3060
aggaaaagct tagaaaagct gctaactcct cagaagaaag catgatagtt taaaggtata 3120
gggcatataa atttaggatt tgaaatatga ttttttaatt aaggtcagtc ctactcataa 3180
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<210> 354

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (470)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (505)

<223> n equals a,t,g, or c

<400> 354

```
gcccacgcgt ccgcccacgc gtccgcccac gcgtccgaga agttgcttag tcatgtctgg 60
ccgtggtaaa ggtggaaaag gtttgggttaa gggaggrgct aagcgtcatc gcaagggttt 120
gcgcgataac atccagggca tcaactaagcc agctatccgg cgccttgctc gtcgcggcgg 180
tgtcaagcga atttctggcc ttatctatga ggagactcgy ggtgttctga aggtgttcct 240
ggagaacgtg attcgtgacg ctgtcaytta cacagagcac gccaaacgca agaccgtgac 300
agcaatggat gtggtctacg cgctgaagcg acagggacgc actctttacg gcttcgggtg 360
ctaaggctcc tgcttgctgc actcttattt tcattttcaa mcaaargccc ttttcagggc 420
sgccamtttt ttcataaaaag agcaagacat cttgktatcc tgctttggtg caaaattttg 480
ctgagaagaa gtactgggca catgng 506
```

<210> 355

<211> 742

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (80)

<223> n equals a,t,g, or c

<400> 355

```
cttacctgtt tttccagctc acccactgcc agcagagaat gctgtccagt ttcaacgagt 60
ggttttgcca ggacaggtnn tggttaccac ccaatgtcac gtggacagag ctagaagacc 120
gggaatggcc gtgtctaccc ccacccccag gacttggttg cagccctgcc cctggcgctg 180
gtcctcctgg ccatgcgcct tgcccttgag aagattcatt ggccctgccc tgagccggtg 240
gakgrgtgtg agggatcaga ccaggaggca agtgaagccc aacgccacgc tggagaaaca 300
cttcctcacg gaagggcaca ggccaaggag cccagctgt ctctcctggc cgcccagtg 360
```

ggcctcacgc tgcagcagac ccagcgatgg ttccggagac gccggaacca ggatcgaccc 420
cagctgacca agaagtcttg tgaggccagc tggagggttc tcttctacct gtcctccttc 480
gtgggcgcc tctcggtcct gtaccacgag tcatggctgt gggcaccagt aatgtgctgg 540
gacaggatcc caaaccagac tctgaagcca tccctgtamt ggtgggtamct cttkggagct 600
gggtttctwa cytctcawtg yttaatcagg tgcccttgat gttcaagcgc aaggattttc 660
aaggagcagg tkgatacamc attttgkggc gggttcattcc tgattgaact ttttcttaca 720
gttgccaact tgttgcggtat tt 742

<210> 356

<211> 1695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 356

gcccacgcgt ccgcccacgc gtcngcccac gcgtccggta gttttctctg cgcgtgtgcg 60
ttttccctcc tccccgccct cagggccac ggccaccatg gcgtattagg ggcagcagtg 120
cctgcggcag cattggcctt tgcagcggcg gcagcagcac caggctctgc agcggcaacc 180
cccagcggct taagccatgg cgcttctcac ggcatcagc agcagcgttg ctgtaaccga 240
caaagacacc ttcgaattaa gcacattcct cgattccagc aaagcaccgc aacatgaccg 300
aaatgagctt cctgagcagc gaggtgttg tgggggactt gatgtccccc ttcgaccagt 360
cgggtttggg ggctgaagaa agcctaggtc tcttagatga ttacctggag gtggccaagc 420
acttcaaacc tcatgggttc tccagcgaca aggctaaggc gggctcctcc gaatggctgg 480
ctgtggatgg gttggtcagt ccctccaaca acagcaagga ggatgccttc tccgggacag 540
attggatgtt ggagaaaatg gatttgaagg agttcgactt ggatgccttg ttgggtatag 600
atgacctgga aaccatgcca gatgaccttc tgaccaggtt ggatgacact tgtgatctct 660
ttgccccctt agtccaggag actaataagc agcccccca gacgggtgaac ccaattggcc 720
atctcccaga aagtttaaca aaacccgacc aggttgcccc cttcaccttc ttacaacctc 780
ttcccccttc cccaggggtc ctgtcctcca ctccagatca ttcctttagt ttagagctgg 840
gcagtgaagt ggatatcact gaaggagata ggaagccaga ctacactgct tacgttgcca 900
tgatccctca gtgcataaag gaggaagaca ccccttcaga taatgatagt ggcactctgta 960
tgagcccaga gtccatctctg gggctctctc agcacagccc ctctaccagg ggctctccaa 1020
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cctcctggag agaagatggt agcagcaaaa gtaaagggtg agaaactgga tctccttggc 1140
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ttgctccatt tttttcagct tcttatccag tttctcacc tttacttttg ctgctacat 1320
cttctctcca ggaggatcgt aagggttggg acgggcagac ccacagagaa cacctggaga 1380
tgaggagctc ctatgtggag agcccctggt agaggggctg tgctgaggag accccagata 1440
ggactctggg ctcatacaga tgccactatc attatctgaa ggggtgtctt cctcctttat 1500
gcactgaggg atcatggcaa cgtaagcagt gtagtctggc ttcctatctc cttcagtgat 1560
atccacttca ctgcccagct ctaaaactaaa ggaatgatct ggagtggagg acaggacccc 1620
tggggaaagg ggaaagaagg aaggaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaaa aaaaa 1695

<210> 357

<211> 928

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (928)

<223> n equals a,t,g, or c

<400> 357

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gctgcgcgcg ggcgagctgc cgcgagcac ccggcagggg ctgacagcat ggcctcgccc 60
gacccgcccc ccaccagcta cgccccgtcc gacgtgccct cgggggtcgc gctgttcctc 120
accatccctt tcgccttctt cctgcccagag ctgatatttg gggtcttggt ctggaccatg 180
gtagccgccca cccacatagt atacccttg ctgcaaggat gggatgatga tgtctcgctc 240
acctcgtttc tcatctcctt gatgttcctg ttgtcttact tgtttggatt ttacaaaaga 300
tttgaatcct ggagagttct ggacagcctg taccacggga ccactggcat cctgtacatg 360
agcgcgtccg tcctacaagt acatgccacg attgtttctg agaaactgct ggaccaaga 420
atttactaca ttaattcggc agcctcgttc ttgccttca tcgccacgct gctctacatt 480
ctccatgcct tcagcatcta ttaccactga tgcacaggcg ccaggccaag ggggaaatgc 540
tctttgaaag ctccaattat tgggtcccaa aagcagcttc caacgtttgc catctggatg 600
acaaacggaa gatccactaa aacgtccacg ggattaacag aacgtcctg cagactgagc 660
gatgacacca cactttgttt ggacatttaa attcactctg ctgaatagga ggaagctttt 720
ctttttcctg ggaaaacaac tgtctcttg aattatctga ccatgaactt gctcttctag 780
acaactcaca tcaaagccct cactccacta atggagaatc ctagccccac taatgccaag 840
tctgtttggg grttttgcct cagctatggg ctccctaga gtaggtctag gggaatatca 900
rtccgatctt tttttttgtt ttgttttn 928
```

<210> 358

<211> 1374

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1374)

<223> n equals a,t,g, or c

<400> 358

```
ggtcgtgggt gggaattgtc gcctaagtgg ttccgggttg gtggatgacc ttgagccctc 60
aggaacgaga tggcggttct ctggaggctg agtgccgttt gcggtgccct aggaggccga 120
gctctgttgc ttcgaaactcc agtggtcaga cctgctcata tctcagcatt tcttcaggac 180
cgacctatcc cagaatggtg tggagtgcag cacatacact tgtcaccgag ccaccattct 240
ggctccaagg ctgcatctct ccactggact agcgagaggg ttgtcagtgt tttgctcctg 300
ggctctgcttc cggctgctta tttgaatcct tgctctgcga tggactattc cctggctgca 360
gccctcactc ttcatggtca ctggggcctt ggacaagtgt ttactgacta tgttcatggg 420
gatgccttgc agaaagctgc caaggcaggg cttttggcac tttcagcttt aacctttgct 480
gggctttgct atttcaacta tcacgatgtg ggcactctgca aagctgttgc catgctgtg 540
```

```
aagctctgac ctttttgact tcatactttg aagaattgat gtatgcctct ttgcctctgc 600
tttgtcatgc cattaagctc acaataagga agaaataaca gataagtcca ttggtggaca 660
gccttcttct cttaatcaca agattatttt cagaatttaa tctttgagga aaaggtttga 720
gaggaattat atctaagttg tgagactgag ttctatatct tggtaggtta atgggggtgc 780
ctcccagctt cttataagac tcacagtata actaaacatg atatatcagc ttttgccttt 840
caatttatca atctcttaaa gagaatccaa ctttattacg attagtatat gatcaaactt 900
ccatatttgc cttgggaata atggacaaaag ggaaatactc ttaattcatg aataaaaaact 960
ttgcagaaaa ttagacagtg ttttaattttc gaaaacttcc ctctctagac agtagatacc 1020
acctactgat ggttacatat actagggaaa ttttaaaatt aggaaatgct gatagctcat 1080
attataaatt tctaaatcct aggaagaaac gcttggagtg cttctgaata tacagaagtt 1140
ccatttaagg gcaagtttcc ccgtagatgt atcaaaatac taccaactgt aaattgagat 1200
ttaattccca aatgtattct acttgttcta aaacaatctg tccacaaata taaaactata 1260
agtaataaat tgttattttc gcacaatggg aatctctaat gtgaaaatgt attctatgaa 1320
aataattttt ttaataaaaa tgttatataa taaaaaaaan aaaaaaagaa aan 1374
```

<210> 359

<211> 4152

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (65)

<223> n equals a,t,g, or c

<400> 359

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tggtgtctct acggatctcg gcctgagggg gtggggggaga aggcctggac agcctcaggg 60
caggntgtgt tttccaccca gccgcagaga gccaggatgg acgttcctcg gacggacggt 120
tttctgtctt gggaatgttc ctgggctgtg agatccactc ttctgggcag gtggttagca 180
cctaacgttt ttccctcact tcccccaaaa ttcttaagtc ctttgggtcca tttcactgct 240
cggaccttga gacaacagtc attctgcctg agtctgtctt cagagagacg cccccctgg 300
tcaggccccg agccccggag agggccagga gccagaggag ctggcacggc gacagcgacg 360
gcacccggag ytgagccagg gtgaggytgt ggccagcgtc atcatctacc gcaccctggc 420
cgggctactg cctcataact atgaccctga caagcgcagc ttgagagtcc ccaaaccgcc 480
gatcatcaac acaccctgg tgagcatcag cgtccatgat gatgaggagc ttctgccccg 540
ggccctggac aaaccctgca cggtgagtt ccgcctgtg gagacagagg agcggaccaaa 600
gccatctgt gtcttctgga accattcaat cctggtcagt ggcacagggt gctggctcggc 660
cagaggctgt gaagtcgtct tccgcaatga gagccacgtc agctgccagt kcaaccacat 720
gacgagcttc gctgtgctca tggacgtttc tcggcgggag aatggggaga tcctgccact 780
gaagacactg acatacgtgg ctctaggtgt crcttggct gcccttctgc tcaccttctt 840
cttctcact ctcttgctga tcctgcgctc caaccaacac ggcattccgac gtaacctgac 900
agctgccctg ggccctggctc agctgggtctt cctcctggga atcaaccagg ctgacctccc 960
ttttgsetgc acagtcattg ccactcctgt gcacttcctg tacctctgca ccttttctctg 1020
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cggccccatg cgttctact acatgctggg ctggggcgtg cctgccttca tcacagggt 1140
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tgacacgctc atctggagtt ttggtggccc ggtggccttt gccgtctcga tgagtgtctt 1260
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aggctctgtc tcgggcctgc agccctcctt cgccgtcctc ctgctgctga gcgccacgtg 1380
gctgctggca ctgctctctg tcaacagmga caccctcctc ttccactacc tctttgstac 1440
ctgcaattgc atccagggcc ccttcactct cctctcctat gtggtgctta gcaaggaggt 1500
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ccggaaagca ctcaagcttg cctgcagccg caagcccagc cctgaccctg ctctgaccac 1560
caagtccacc ctgacctcgt cctacaactg ccccgagccc tacgcagatg ggcggctgta 1620
ccagccctac ggagactcgg ccggctctct gcacagcacc agtcgctcgg gcaagagtca 1680
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taccactca tcagacagtg aggaggaaga agaggaggag gaagaggagg ccgccttccc 1920
tgagagcag ggctgggata gcctgctggg gcctggagca gagagactgc ccctgcacag 1980
tactcccaag gatggggggc cagggcctgg caaggccccc tggccaggag actttgggac 2040
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ccccctggag caatgcacag ggtcttcccg gggctcctcc gctagttagg gcagccgggg 2280
cgkccccctt ccccgcccac cgccccgga gagcctccag gagcagctga acggggctcat 2340
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tctcttcttt aacttcctgc attaaccttg ggccgtgggt cctamgcccg aggtccctt 2460
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catcgctgc cgcagcagcg acgaaacgtc catctgagga gcctgggcct tgccgggagg 2580
ggtactcacc ccacctaaag ccatctagt ccaactcccc cccaccatt cccctcactg 2640
cactttggac ccctggggcc aacatctcca agacaaagt tttcagaaaa gaggaaaaaa 2700
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ggaaattgac tcccctttcc cttcccaaag aggataggac ctcccaggat gcttcccagc 2820
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ccctcatag ccataccaa aaggaaagga caaagccaca cgcagccagg gcttcacacc 2940
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cgtcctgccc gcactgcctc tcccaggaac tggaaaagcc ctgtccggtg agggggcaga 3060
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cggcagccca ggtgtttgct cagttgctga cccaaaagt cttcattttt cgtgcccgc 3240
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attggtctc ttcttcaaag gaccaggctc tgttccctct tctccccgac tccacccag 3540
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ggttcgtgtc cagtcgccgg ggtctgatat ggccatcaca ggctgggtgt tcccagcagc 3660
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tattccagac ttgtcactga ctttcttctt ggagcagggt gctagaaaaa gaggctgtgg 3840
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attctcccc tgtcttctcc cctcagcaat tcctgcaaa ggttaaaaaa ttaactgggt 3960
tttactactg atgacttgat ttaaaaaaaa taaaaagat ctggatgcta acttgatact 4020
aaccatcaga ttgtacagtt tgggtgttgc tgtaaatatg gtagcgtttt gttgtgtgtg 4080
ttttttcatg cccatacta ctgaataaac tagttctgtg cgggtamaaa aaaaaaaaaa 4140
aaaaaaaaaa aa 4152

<210> 360

<211> 1156

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (49)

<223> n equals a,t,g, or c

<400> 360

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ggctccgagac acagtcgtgg gcaccatggg cctgaaggcc acggggccgnc tctgcaccgt 60
ggctaaggca agggggctgc gagcctgcag gggagagctg agggacacca tcctagactg 120
ggaggactcc ctgcccagacc gggacctggc actcgccgat gagccagcag gaacgcccag 180
ctgtccatca cgctgggtac atcgctgcag atccggccca gcgggaacct gccgmtggct 240
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catgctgacc tccgcatcca tggctacgtt gacgaggtca tgacccggct catgaagcac 360
ctggggctgg agatccccgc ctgggacggc ccccgctgtg tggagagggc gctgccaccc 420
ctgcccgcgc gccaccccc aagctggagc ccaaggagga atctcccacc cggatcaacg 480
gctctatccc cgscggmccc aagcaggagm cctgcgccc gcacaacggc tyararcccg 540
ccagcccaaa acgggagcgg cccaccagcc ctgcccccca cagaccccc aaaagggga 600
aggccaaggc ggtccccagc tgaccagggg gcttggggag ggtggggctt tttgtagaaa 660
ctgtggattc tttttctctc gtggtctcac tttgttactt gtttctgtcc cygggagcct 720
cagggctctr aragctgtgc tccaggccag gggttacacc tgccctccgt ggtccctccc 780
tgggctccag gggcctctgg tgcggttccg ggaagaagcc acaccocara ggtgacagct 840
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gccccctaca gccacccta cccctcctcc atgggcccctg caggagggga gaccacctt 1020
gaagtggggg atcagtagag gcttgcactg cctttggggc tggagggaga cgtgggtcca 1080
ccaggcttct ggaaaagtcc tcaatgcaat aaaaacaatt tctttcttgc aaaaaaaaaa 1140
aaaaaaaaaa aaaaaa                                     1156
```

<210> 361

<211> 376

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (371)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (374)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (376)

<223> n equals a,t,g, or c

<400> 361

```
tgggaagtga ttttgggag ctaattgagg cctanggtga aaaaggaaat agcttcagat 60
waaaaytaga aagaagcttt ctgagaaact gctttgtgat rtgtgcattc atctcacaga 120
ggtaaattctt tcttttgatt cagcagtttg gaaacctggc taacatgggtg aaccgggtgt 180
ctactgaaaa tacaaaaaat tagccagggtg tggtaggcaca atgctgtaat cccagctact 240
caggaggctg aggcaggaga atcgcttgaa cccgggaggt gggagggttac agtgagccaa 300
gtttgtgcca ctgcattcca gcctgggctt atagagtggg acttccgtct tcaaaaaaaaa 360
aaaaaaaaa nctngn 376
```

<210> 362

<211> 519

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<400> 362

```
ccctaagcca tttttgaaga gaggacctgc cctagcttta tgacttaaga ccatgactat 60
gcatcttaag ttgcccctct gactgggcag ctttctcctg aacacagtga ggaatgctaa 120
gttacatggt ccagtaamtg agtggatacc ctgagcccc gcatcccact ggctgctatg 180
cagggataag tccatgcacc tgtggatggc agtgggttgag ctggttctct ataaaagtat 240
ccagtgccca gacctttggt cacacatgca tgtaaattta ctgggaaaac tctagagacc 300
aatgttcttt cttccacaga aatctggcct agcagtctat tcttaaattg ctctttgtgt 360
gtaagacaca tctgtttgat accccactct gccctgactt ttaggcaaat ccgttaggac 420
aggaaccact attttctttc cttccctttg aatcatcttt taaagcagca gaggcaatgt 480
tkggcagagg tccacattgg gaaagttagt gcatcanga 519
```

<210> 363

<211> 1385

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1320)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1340)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1350)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1360)

<223> n equals a,t,g, or c

<400> 363

```
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ttccttgtcc cggggagtcc gcgcctccca cggcggacct ggaagagaaa agagcaaagc 180
ttgcagaggc tgcagagaga agacaaaaag aggctgcatc tcggggaatt ttagatgttc 240
aatctgtgca agaaaagaga aagaaaaagg aaaaaataga aaaacaaatt gctacatccg 300
ggcccccacc agaaggtgga cttaggtgga cagtttcata aagcataaca tgagtagaag 360
aatctactgc caataactgt ttattatctg caatcaagtg ggcttcatca atttaatttc 420
ttctctttga gtaaataaag attcagactt tgtaatatta ttgcccttaa gtgcaatgct 480
aaaaaacgt tgattttcaa gcttagagaa tggctagact tttcattaaa tactgatttt 540
cctacatttg ctcttctgca gttagtgggt gatttgctat ttttcttagt agttaaaaaa 600
tggaactaaa tagtgaatat acatacactg catgtaaaca ttctgcatat acctctaaga 660
ttaaaattcg cagttgtctt ttcattcctt ataaaatgat ctaactactt atatttgtgc 720
tgcacgcgt tacatctgtt tttatttcac tatgaagatg tttgattaaa cttatggact 780
tagtgccttt aaactgatca tcaggagagaa tcttgaaaaa atcatttgaa gggctgatgt 840
gaaggagcac tgtaaatttt tataacttag taatgagtat tcttaggcag atgtaaaatt 900
ttttccaatt tatttttatt tatgtagctt ataaaattaa cataccctgt tttactttat 960
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agtgatgttc tattgtatat taaattcagc tctgtaagga tctttgtagt aattgaatga 1080
gttaaactaa taatctggat gggttataat gagtagtaat atatttgtcc atatttcata 1140
agtagtgkta atcttgkgka cttattagag gaacgatcat aaggatttat acaggatgtg 1200
gaaactgcgg aaggcaagtt atkgaatgta tgraaaaaaa catgtagggg actgkacttt 1260
accaaaaggg tctacttcca ggatattaaa aatattaggg gtaattctat taccatgccn 1320
aggtccttaa cccttaaccn ttttgttccn tagggaaccn ggattttatg gccttttttg 1380
gtttc
```

<210> 364

<211> 977

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (25)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (962)

<223> n equals a,t,g, or c

<400> 364

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tttccggata tttttggtgg aattcccca aagggaaatc cacagggctg ttccgaaata 120
ttgggggaac actgtttttc ctgcatcatc ctgcatttgc tccccaaagca atgtagaggt 180
gtttaaaggg ccctctgctg gctgagtggc aatactacaa caaacttcaa ggcaagtttg 240
gctgaaaaca gttgacaaca aaggggcccc atacacttat ccctcaaatt ttaagtata 300
tgaaatactt gtcattgtct tggccaaatc agaagatatt catcctgctt caagtcagct 360
tcagaaatgt tttaaaaggg acttttagctc tggaaactcaa aatcaattta ttaagagcca 420
tattctttta aaaaaaaaaa gctggataat attmtctgta atatttcagt cttttacaag 480
ccaaatacat gtgtcaatgt ttctagtatt tcaaagaagc aattatgtaa agttgttcaa 540
tgtgacataa tagtattata attgggttaag tagcttaatg attaggcaaa ctagatgaaa 600
agattagggg cttccacact gcatagatta cacgcacata gccacgcata cacacacaga 660
cacacagatg tgggggtacac tgaacttcaa agcccaaagc aatagaaaca cattttctgg 720
ctagcagaaa aaaacaaaac aaaactgttg tttctctttc ttgctttgag agtgtacagt 780
aaaagggatt ttttcgaatt atttttatat tatttttagct ttaattgtgc tgtcgttcat 840
gaaacagagc tgctctgctt ttctgtcaga gatggcaagg gctttttcag catctcgttt 900
atgtgtggaa tttaaaaaga ataaagtttt attccattct gtgtgaatgg tttgagcagt 960
gngaaaagga caaaaaa 977
```

<210> 365

<211> 964

<212> DNA

<213> Homo sapiens

<400> 365

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gttcggcaca gaaagggaga tgggtagcat cattttgatt aacatttggg gcctgatagg 60
ggaaatggtg aagcaatgga aaagaacaga caactaatga tttgcttcta tgtccagaat 120
attttacctt taaaaaatg tcattggcac cataaataag gactgtgaga gactgtttaa 180
aagctgtgaa agtctgaaac ctataagcca aggtgttccc tgcctaaact tattgtgtgt 240
cccacaaagg actaagcctg ttcataagtt accaaagttg ccattttgga gatggaaatt 300
gacgaggagg gaaggtcttt tattggagag tatacagtac aagcagatca ttctgcctta 360
gaggtgctaa ttcccgaat tagaagacct tttcttttcc agtaacgaag ttataaatat 420
cagcttgctt atccaagcca ctggctgagg tgttaggaag aggaagaggg tggtagagga 480
ggtaagacag tagggaaaga caagggccca tgctcttagt ggggaaaact cttggagccg 540
tttactttga gctttgaaca ctgaaaccat tgttggcagg gttcagtcac tgacagcaca 600
agtttactcg aattgatcca agagttagt gatttcaaaa gccttggtct caggagaaga 660
ttaaactttc atattgggca gtggttcact ttaaaacaca cacatacaca cacaaaacaa 720
ttttttaaga aatcctaata agtaacatac caaaatgct ctgtcttgag tcatgagaac 780
catcagttct tgatattgtc tagacttgca tctagagcta cgttgtaaaa ttcttttagg 840
catgtgttag atttctgtgt aaactttgtt taaatgtaaa cttcatacta cattgtcagt 900
ttttgtctta ataaaactat agatttataa aaaaaaaaaa aaaaaccgcg gggggggggc 960
ccgg 964
```

<210> 366

<211> 1297

<212> DNA

<213> Homo sapiens

<400> 366

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gtggcttacg cctgtaatcc cagcactttg ggaggccgag gcaggcggat cacgaggtca 60
ggagttcgag accagcctga ccaacatggc gaaaccccggt ctctactaaa aatacaaaaa 120
```

ttagctgggc gttatggcgg gcgcctgtaa tcccagctac ttgggaggct gaggcagaag 180
aatcgcttaa acccaggagg cggagggtgc agtgagctga gatcatgcca ttgcaactcca 240
gtctgggcga caggagcaag actctgtctc aaaaaaaaaa atcattcttt ttagtcttag 300
cacctactta aggatccact tttagggtc acccacattt gtttctagat ttaccctctgc 360
gctagagtaa gcactttatc tccagaactg agagcaaagt taacaaatct cacccttct 420
ctcctgcaaa ttagtggaaca gactccctgg aacatgtttg gggcttccac ctagggccac 480
ctagtggat ctctgggtct ttacttggtc agatgtttat tctacattgt tcccaggaa 540
cagagtatga gctcattgat gcagaccgat tctaattgcc aggccctaata ttgcagacta 600
actctcataa taaacagagg cccatagttg tttatgaact gcttatccct taaaggagca 660
caagaacccc tccctgccct ccttgggcac cctgcctcca ggagatggag gcacgtgata 720
agacaaaaga ctgcaccaac tcaccctgac acagttacat agtcaactgag agtgggggaa 780
atgggacagc ccacatgctg cataagatgg gccttatgca gcaggcccag gtcgtcatta 840
aggagtgacc ctttctctgt aacctgcact ttgggatggt agaagtttct ttacctgctg 900
acaggtttg tggcactgct ggttaccct gggccctgaa tggagctaaa atcacatttg 960
gtaccagcag cacctatccc aagtgtgatc ctcatccca acactccctc ttggagctgt 1020
tccctgggta gagctagcat gccagcagct tctgcaggct ccaaaccag gccagaagcc 1080
agaccaggc ctgctgcctg catctgcatt cctccttcc agtgttcctt agaacagaca 1140
tttaggtatc tcaggtcctt tctaagtgtc ctttctctat gtatgcattt ctttttttg 1200
tctttactat gcactttagc ttataaagcc aattaaaaac gatgattgag aaaaaaaaaa 1260
aaaaaagggc ggcgtcttta gaggatccaa agcttac 1297

<210> 367

<211> 785

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (704)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (746)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (753)

<223> n equals a,t,g, or c

<400> 367

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agcccctgga ggactcgact cactggtgag cgatttaggt ccggagaggc gttgtgaggt 120
gagctttttc agaagcgcga tcccaggaca cgtcgggaag caagcatccc cagagctgct 180
tggaagagg accaaagacg tctaaaaagt catttggaat tatctctaaa tatttggtac 240
catgtataag ctgctaaaga gaaattgggc ccaacaaaac taattgaata attgaggcag 300
atttgtgtgt atcatcaaat tctatccaga agttgaagaa tctgaattta aagattgtgt 360
gcatttaata agaggatgac ctttcagttt aatttcacta tagaagacca tctggaaaaat 420
gaattaacac ccattagaga tggagctttg accctggatt cctcaaaaaga gctgtcagtc 480
tcagaaagtc aaaaaggaga agagagggac agaaaatggt ctgcagaaca atttgacttg 540

```
cctcaggatc acttgtggga acataagtca atggaaaatg cagctccctc tcaagacaca 600
gacagtccac tcagtgcagc cagcagttca aggaacttgg gagccacatg ggaaaacagc 660
cctccttgag agctggccaa aggrgcmgtc tatgccttaa aggnntttaa gaagrtgttt 720
aggaaaatwa aagtycttag gaaacnttta ccnggggtttt ccmgyctgtt taagttwttc 780
rgtta 785
```

<210> 368

<211> 920

<212> DNA

<213> Homo sapiens

<400> 368

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ggcagagctc atgccatcac agtatctgtt gcaaatraaa aggcactagc taagtgtgag 60
aagtacatgc tgaccaccca ggaactagcc tccgatgggg agattgaaac taaactaatt 120
aaggggtgata tttataaaac aaggggtggt ggacaatctg ttcagtttac tgatattgag 180
acttttaaagc aagaatcacc aaatggtgtt ctgtggctgt ggagatgaga gcaggatccc 240
agctgggacc tggatatcag catcacgcac aacccaagcg caaaaagcca tgaactgaca 300
gtcccagtac tgaaagaaca ttttcatttg tgtggatgat ttctcgaaag ccatgccaga 360
agcagtcttc caggtcatct tgtagaactc cagctttgtt gaaaatcacg gacctcagct 420
acatcataca ctgaccacga gcaaagcttt ccctatgggt ccaaagacaa ctagtattca 480
acaaaccttg tatagtgtat gttttgccat atttaatat aatagcagag gaagactcct 540
tttttcatca ctgtatgaat tttttataat gtttttttaa aatatatttc atgtatactt 600
ataaactaat tcacacaagt gtttgtctta gatgattaag gaagactata tctagatcat 660
gtctgatttt ttattgtgac ttctccagcc ctggtctgaa tttcttaagg tttataaac 720
aaatgctgct atttattagc tgcaagaatg cacttttagaa ctatttgaca attcagactt 780
tcaaaaataaa gatgtaaatg actggccaat aataaccatt ttaggaaggt gttttgaatt 840
ctgtatgtat atattcactt tctgacattt agatatgcc aagaattaa aatcaaaagc 900
actaagaaat amaaaaaaaaa 920
```

<210> 369

<211> 834

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (533)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (831)

<223> n equals a,t,g, or c

<400> 369

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cctagaacgc tttgcgtccc gacgcccgc ggtcctcgcg gtgcgcaccg tttgcgactt 60
ggtacttgga aaaatggaca aggattgtga aatgaaacgc accacactgg acagcccttt 120
ggggaagctg gagctgtctg gttgtgagca ggtctgcac gaaataaagc tcctgggcaa 180
ggggacgtct gcagctgatg ccgtggaggt cccagcccc gctgcggttc tcggagggtcc 240
ggagcccctg atgcagtgca cagcctggct gaatgcctat ttccaccagc ccgaggctat 300
cgaagagttc cccgtgccgg ctcttcacca tcccgttttc cagcaagagt cgttcaccag 360
```

```

acaggtgtta tggaaagctgc tgaaggttgt gaaattcggg gaagtgattt cttaccagca 420
attagcagcc ctggcaggca accccaaagc cgcgcgagca gtgggaggag caatgagagg 480
caatcctgtc cccatcctca tcccgtagca cagagtgggc tgcagcagcg ganccgtggg 540
caactactcc ggaggactgg ccgtgaagga atggcttctg gcccatgaag gccaccggtt 600
ggggaagcca ggcttgaggag ggagctcagg tctggcaggg gcctggctca agggagcggg 660
agctacctcg ggctccccsc ctgctggccg aaactgagta tgtgcagtag gatggatgtt 720
tgagcgacac acacgtgtaa cactgcatcg gatgcggggc gtggaggcac cgctgtatta 780
aaggaagtgg cagtgtcctg ggaaaaaaaa aaaaaaaaaa aagaaaaaaaa naaa 834

```

<210> 370

<211> 947

<212> DNA

<213> Homo sapiens

<400> 370

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tggcaataga atagctggat aactaatct ctacaagggtg tcaggcagga gattcaccgt 60
tccccagtc caggggcagg agagaaatct gtaaaggac agatgcacca tctttatttc 120
aaaaaagaaa gctccctcag attgtgttac taggagtctc ttttgtgaca ttactgasc 180
tttctcccca atcttacctt cctattggct actttttaa taaaaataaa cattttaggc 240
taatattgaca aaaatgagat aaaatcttaa aaacattgta ctagtgtaca gttactaaaa 300
tgtgcttact acaaaacagt aaaatatttc actctgtaaa tcatcactaa gtagttattc 360
tgtcctgttg attatgagcc tccaaaaatg tttaatgctt gamggatggt ttgggaggca 420
gggaatcctt wtcttaaaac ractktaatg aggcataatg tacatatcat aaaacaccca 480
tktcaagtgt acatytacgt gatttttagta acttccctca gtggtgtagc tgtarctatt 540
actcagttyt agawcatktt tatccccca ataagatctt catgctcwkt tacagttaac 600
ctgtgcttac ccagcaaca ctaatctact tctctataaa ttgcctttct ggcagtcaat 660
catggaatca tcatagtggc cgtgggtctg cttgtactag aatgtttgag gttgtcagca 720
gtacgtcttg actgtcgata tgcggggaac ggtgtgtggc cattgctgcg ggcttacatg 780
gtcatctgtc tacgactcgc gtgctatgga cgtggtcaaa ccatcgggag cgtctccgcg 840
tcgagttttg cttgtgtagg ggcactggtg cagtttggtg ggagaggccg gtccccgggg 900
aaactctgga gactttgcga gagccgctct agcgcacctt ggtggct 947

```

<210> 371

<211> 2340

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (316)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2301)

<223> n equals a,t,g, or c

<400> 371

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ggcacagcag gaactccagg ttctgctggc cgtggcatcc tctctccarg tctgctccct 60
taccggagct asgataasgt agcatgartg acacctgaga ttagaggctg gggctcactg 120
caggctgtgg agaggatcatg ctggtccaca ggaacacttg gcagtgtctt cgtagacccc 180

```

```
tcggtgatgt ggaatggaca ggtgcctcgc aagagagcaa gcacgttcat aacaaaacag 240
caacacaaag acatgtttaag catgtttatt tatttgctg tttttgtttt tttacttgag 300
ctgtggctac agctgnccag gtacctaaag aagtcagttg ggtacagcag gacacgccac 360
cattccaggg tagctggtac cgccagaaac aggagtgggt cttgtcctgt tgcaggcaca 420
ctgcagtggg tttcctgcag ctctccaaca aacgcctgag tcacaggcca gagctgcctt 480
ggtatgttgt taagtccaaa acttcttctc tgggtacct atcttccttc atgaagcagg 540
tgctcaggac ccggaagaat catctacctc ccagctttgt gagacagaac caagtaaaag 600
gaaacatgct agaaaacgtg cctagagaag acacttcaac ctttgcccta tccaaccctt 660
cttcagagaa aggtgtccca tggcccaaaa aagaactgcc aagttttggg gaggagtaac 720
accctggcat gacattcctt ctctttcctg gccctcaacc acttccttcc tttggctctt 780
aagacctagc aggttctgtg aactctcagg ccttggccag cactagttag gggaggctag 840
gtgggtcaatg tcctgggtgat tttatgagac tgccccactg agaaaactta cttacttcag 900
gcatccagtg cccccacca gggttcaggc cctgtctaag gtgttgctta aagacaaaaa 960
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gattttcagc cctggtagaa taaggaagac agctgatgcc tccttagccc cttagcacat 1080
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tcttctctct gttaaggagg agaagtcact ttagctggat aatacctatg taacaaactg 1560
agcagctgtt atttgggcaa aatcaaagga agaaagagac tatgggtctt tattttattgt 1620
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ctttcagaaa acattagtgg ccgctgcccc agctacagag acggccgaaa tgctttcact 1860
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ccaaatctgt acttgggagc agcctgctgg atccagaaca tgacaacaga gagctgcgtc 1980
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catgagagag ctacacggca ggggcagaca ctgtgagtat aagctacttt cctccctgga 2100
gtgctctatg tgggcagaac atgctctcct tgctctcctt ggaagggtgc ttctctatgg 2160
cctggctaga gctgcaaaaa agggacacac ccacttcgg taaaagaaaa tagggaaagg 2220
ccataaacia agacagactt gtagtttatt ttgtatTTTT tttaaataaa tacactttac 2280
attaaaaaaa aaaaaaaaaa ncgggagggg tggcctaacc caaaagtga agctaaacct 2340
```

<210> 372

<211> 1575

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (58)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1492)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1548)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1556)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1559)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1565)

<223> n equals a,t,g, or c

<400> 372

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agcggctctt ccgctctccg tccatgccct gcagcgtgat ccggcccatc ctcaagaggc 120
tggagcggcc ccaggacagg gacacgcccg tgcagaataa gcggaggcgg aggtgacccc 180
tcctgaggag cagcaggagg ctgaggaacc taaagcccgc gtcctccgct caaaatcact 240
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ctctaaggcc ttctccttac agacagtaga cggaaagcac caagacctca agtacatctc 360
accagaaacg atgggtggccc tattgacggg caagttcagc aacatcgtgg ataagtttgt 420
gattgtagac tgcagatacc cctatgaata tgaaggcggg cacatcaaga ctgcggtgaa 480
cttgcacctg gaacgcgacg ccgagagctt cctactgaag agcccccaty cgccctgtag 540
cctggacaag agagtcatcc tcattttcca ctgtgaattc tcatctgagc gtgggccccg 600
catgtgccgt ttcacagggg aacgagaccg tgctgtcaac gactacccca gcctctacta 660
ccctgagatg tatatcctga aaggcggcta caaggagttc ttccctcagc acccgaactt 720
ctgtgaaccc caggactacc ggcccatgaa ccacgaggcc ttcaaggatg agctaaagac 780
cttcgcctc aagactcgca gctgggctgg ggagcggagc cggcgggagc tctgtagccg 840
gctgcaggac cagtgagggg cctgcgccag tcctgctacc tcccttgcct ttcgaggcct 900
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atcccatcat tttccatata ctggtgcccc ccaccctgg aagagcccag tctgttgagt 1080
tagttaagtt gggttaatac cagcttaaag gcagtatttt gtgtcctcca ggagcttctt 1140
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tgtcagctga ggctggggga gagccgtggg ccctgaggat gggtcagagc taaactcctt 1260
cctggcctga gagtcagctc tctgccctgt gtacttcccg ggccagggct gcccctaatac 1320
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caccatacga gcacctccag cctgaacaga agctcttact ctttcctatt tcagtgttac 1440
ctgtgtgctt ggtctgtttg amtttamggc ccatcttcag ggacamtttc cntwagrmrk 1500
gttttaaggg ttcccctgkt caaatatcag ttacccattc ggtcccangt ttttgntgnc 1560
ccaanaaggg gaagg                                     1575
```

<210> 373

<211> 1878

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1717)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1764)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1771)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1773)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1810)

<223> n equals a,t,g, or c

<400> 373

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<210> 374

<211> 846

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (703)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (747)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (786)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (797)

<223> n equals a,t,g, or c

<400> 374

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cctgtctgtc ggagacgacg gtgttgggcg ccgtgctgcg gcacatcagc gtgctgggtg 240
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cgggccccag cgaagcctcc agcccttgg ctaacccctc tgncccaagt catcattggc 720
tgtatcaagc tcatccccaw tgcccgnntc taaccgctg cgaatgcamt gcatccgtgg 780

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aatcct 846

<210> 375

<211> 657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

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<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (634)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (646)

<223> n equals a,t,g, or c

<400> 375

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accaaggatg agcagctgga aagcctattc cagaggactg cctgggtctt tgatgacaag 540
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<210> 376

<211> 695

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (39)

<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (56)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (103)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (647)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (653)
<223> n equals a,t,g, or c

<220>
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<222> (662)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (680)
<223> n equals a,t,g, or c

<400> 376
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gagagtcagc taaggagat aggggtctat gaaggggtgg ggctgtttta taagatttag 180
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cacaagggtgc tcagtggggg agattttttg agccaagata agccaggaaa aggamtcca 300
caagktaatg tcatcagtta aggcaaggac tggccatttw crcttctttt gtggtggaat 360
gtcatcagtt aaggyrgggc agggcatwtt cacttctttt stgattcttc agttacttca 420
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attcctagtg ctgtgtgggc acttagcaaa taattttaga acaaataaat acactttgcc 600
agatttaata gagaagtttt tacttactga agttggaaga tttgtangtg ttnccactcg 660
cnccatggac agtaatgtan ggatttaaag gcagg 695

<210> 377
<211> 3610
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 377

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caagccctca ctcgactctc gcggccttcg ttgctcgcac agctccctgc ccaggctagg 180
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tacgacggcg ttgatatcgg tggtaacgac ggcctcagca ggcggggaag atgaaagtag 300
ccggatcgag ctgggagatg tgacaccaca caatattaaa cagttgaaaa gattgaatca 360
ggtcatcttt ccagtcagct acaatgacaa gttctacaag gatgtgctgg aggttggcga 420
gctagcaaaa cttgcctatt tcaatgatat tgctgtagg gtagtgctg gtaggggtga 480
tcattcacag aatcagaaga gactttacat catgacacta ggatgtctgg caccttaccg 540
aaggctagga ataggaacta aaatgttaaa tcatgtctta aacatctgtg aaaaagatgg 600
tacttttgac aacattttatc tgcatgtcca gatcagcaat gagtcggcaa ttgacttcta 660
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gcaaaagaca gacaactgaa caaattacaa atgaactttc ttgcacttgc ttgtcgccaa 840
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<210> 378

<211> 223

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (68)

<223> n equals a,t,g, or c

<400> 378

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agaagttggt ctccctaatac attgaaaaac catgaattca taktgatggt ttcccaaagc 180
ccaaaccaac ccaaccaaac atgttatttt gtccctccttg gaa 223
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<210> 379

<211> 809

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (171)

<223> n equals a,t,g, or c

<400> 379

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gccgagcgcc ggcgttgggc agaagcacag caccctccgt aagggcaccg ngagagcccc 180
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gagtttgata aactcttata ccagtgatat tgactgtttt aaattaacag atttatcacc 480
atttctgagc tgtgtagggc ctttaattgaa aaagtatctt tgattatttt ttcacatttt 540
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ttaacattct tctctcaatg agttttcctt taaaatttgc agtgaatttg ttttcctgtt 720
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cccttgttgc aaacggacgc gtgggtcga 809

<210> 380

<211> 2550

<212> DNA

<213> Homo sapiens

<400> 380

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tttccattaa gaaaaaaaaa agtccccctt 2550
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<210> 381

<211> 1268

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1259)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1262)

<223> n equals a,t,g, or c

<400> 381

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atcagcctct cttactgtac tctccgggaa tgtaaacctt tctattttca gcctgtgcca 360
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gaactctatc ctgttaggat cttctgagct tgtttccctg ctgggtggga cagaggacaa 960
aggagaaggg aggttctaga agaggcagcc cttctttgtc ctctggggta aatgagcttg 1020
acctagagta aatggagaga caaaagcct ctgattttta atttccataa aatgttagaa 1080
gtatatatat acatatatat atttctttta atttttgagt ctttgatatg tctaaaaatc 1140
cattccctct gccctgaagc ctgagtgaga cacatgaaga aaactgtgtt tcatttaaag 1200
atgttaatta aatgattgaa acttgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaana 1260
anaaaaaa 1268
```

<210> 382

<211> 854

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (794)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (807)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (835)

<223> n equals a,t,g, or c

<400> 382

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gcggacgcgt ggcggacgcg tgggtgctta tgaacatcca ggctccagcc ttttccctga 60
gggtcctaata gactatgtct tcagtcattct tccactccac tctcagcaac aagtgcgagc 120
ccctatcccc atggtgcccc ttggtgggat ccagatgggt cactccatgc cgccagccct 180
ttccagttta catccttcac ccacattgcc cctgccaatg gagggctttg aggagaagaa 240
aggcgcgtca ggggagtcct tctccaagga cccctatgtg ctttctaagc agcatgagaa 300
gcgaggtcct cacgctttgc agtcattctg tccroctagc actccctcct ctctcggct 360
gttgatgaaa cagagcactt cggaagacag cctaaacgca acagagcggg aacaggagga 420
aaatatacag acttgtagaa aagccattgc ctctctccgg attgccacgg aagaggcagc 480
tctgctcggg ccagatcagc cagcgcgggt gcaggagccc caccagaacc ccctgggaag 540
tgcacatgtt agcattagac actttagtag acctgagcca ggtcagccct gtacctcagc 600
caccaccctt gacttgcatg atggtgaaaa ggacaatttt ggtacatcac agactccatt 660
agctcactcc acgtttttaca gcaagagttg tgtggrtgac aagcagttgg rcttttcaca 720
gcagcaaggg aattttcttt caagcacagr gggaaagcaa agatccttcc ttcaggaaaa 780
gagtycagct tacnttggtc ttttggnatg ctgggngat tttccttttc ccacnttttt 840
cccccttttt tttg 854
```

<210> 383

<211> 1091

<212> DNA

<213> Homo sapiens

<400> 383

```
gttttcagga ttgcattgtc tatgcaaaga ataaggcctg gcacatcata agcactcaaa 60
gtattatgtt tctttttccc tattctaact cagcattatt ggtgcttctt atatgacttc 120
ctctcatttt tatcagatgt gatgactgaa gccaccaca aatatgacca ctctgaggct 180
acaggatcct caagctggga tatccaaaat tctttcagaa gagagaagct ggaacaaaaa 240
tccccagatt cgaagacact acaggaagat tcacctggag tgagacaaag ggtctatgag 300
tgccaggagt gtggaaaatc cttccggcaa aaaggtagtc taacgttaca tgagagaatc 360
cacactggtc aaaagccttt tgagtgcacc cactgtggaa aaagcttcag ggccaaaggc 420
aatcttggtt cacatcaacg gatacacacg ggagagaagc cttatcagtg caaggagtgt 480
gggaaaagct tcagtcaacg aggtagtctc gctgtccacg agagactcca cactggacag 540
aaaccctacg agtgtgctat ttgtcagaga agcttcagga atcagagtaa cttgtctgtt 600
```

cacaggagag ttcacagtgg tgagaagccc tatagatgtg atcagtgtgg aaaagccttc 660
agtcagaaag gaagcttaat tggtcacatc agagtccaca caggcctgaa gccctatgcc 720
tgtacccagt gcaggaagag tttccacacc agggggaatt gtattctgca tggcaaaatc 780
cacacaggag agacacccta tctgtgcggc cagtgtggaa aaagcttcac ccagagaggg 840
agtctggctg tgcaccagcg aagctgctca cagaggctca ccctttgacc actttcctga 900
agagaagtgc tctttatgaa ttaagagtac aaaatcctct gagatgaagc aacctatcca 960
gttctatgga atgaatggag aatctttcag aaagaccatc attgggtagg gcaaactgat 1020
ttttttcctt tccccaaaa gagtatgaaa aataaatgtc ttgtttatta tcattaaata 1080
aaaaaaaaa a 1091

<210> 384

<211> 1029

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1014)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1015)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1026)

<223> n equals a,t,g, or c

<400> 384

ggcacgagct ggtcaaggcc gttccgtcag tgttttcaga cgccctggga acgcggtgc 60
agggtccggt cttcggtttg cacagctaga ggccgcgcac agcaaaggat gagcggaacc 120
ttggaaaagg tgctgtgcct gaggaacaat accattttta agcaagcctt ttctctctta 180
aggtttagaa cttcaggaga gaagcccatc tattctgtag gtggaattct actaagtatc 240
agtcggccct acaagacaaa gcccacccac ggcatctggaa agtacaagca cttaattaaa 300
gcagaagagc ccaagaagaa gaagggaaaa gtggaagtga gagccattaa tttggggaca 360
gattatgaat atgggggtttt aaatattcat ctgactgcat atgatatgac cctggcagag 420
agttatgccc agtatgttca caacctctgc aactctctct ccattaaagt cgaggaaagt 480
tatgcaatgc caacaaaac catagaagtg ttgcagttgc aggaccaagg cagcaaaatg 540
ctcctggact cagtgcctac caccatgag cgagtgggtc agatcagcgg tttgagtgtc 600
acgtttgcag aaattttctt ggaaataatc caaagcagtc ttcctgaagg agtcagactg 660
tcagtgaagg agcacactga agaagacttc aaggacgat tcaaagctcg accagaactg 720
gaagaactgt tggccaagtt gaagtagcta ctgtagaccc tttcatgcca gcagtgggtca 780
tattgagtgc caaagagaag agcttactgg gtagtttagag ttcattcagga gacccaaccc 840
ttagatttca taagtaccca ttcccatagc cagtaaatgtc ctactcctc tgtggcttgg 900
ctgtacttgc catttcttac cacttaccta tgaggtaatg cttgttatct tccatctaata 960
aaaaatctgc tgcagatgtg taaaaaaaaa aaaaaaaaaa aaaaaagaaa aaannaaaaa 1020
aaaaanaag 1029

<210> 385

<211> 583
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (551)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (574)
<223> n equals a,t,g, or c

<400> 385
ccccgggtcg acccacgcgt ccgcccacgc gtccgcrcgg ccgactcgca agatggcgcc 60
gcagaaagac aggaagccca agaggtcaac ctggagggtt aatttggacc ttactcatcc 120
agtagaagat ggaatttttg attctggaaa ttttgagcaa tttctacggg agaagggttaa 180
agtcaatggc aaaactggaa atctcgggaa tgttggtcac attgaacgct tcaagaataa 240
aatcacagtt gtttctgaga aacagttctc taaaagggtat ttgaaatacc ttaccaagaa 300
ataccttaag aagaacaatc ttcgtgattg gcttcgagtg gttgcatctg acaaggagac 360
ctacgaactt cgttacttcc agattagtca agatgaagat gaatcagagt cggaggacta 420
ggcaaaggct ccccttacag ggctttgctt attaataaaa taaatgaagt atacatgaga 480
aataccaaga aattggcttt tagtttatca gtgaataaaa aatattatac tcttgaaaaa 540
aaaaaaaaaa nggcggccgt tttaaagatc ctnaggggc caa 583

<210> 386
<211> 2410
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2167)
<223> n equals a,t,g, or c

<400> 386
tatacccacg cgtccgcgga cgcgtgggtc gctgggctca gcagtgaagc tgcggacctt 60
cgcggagaac tatcctatcc ctgaaccagg cccaaatgag gtcttgctga ggatgcattc 120
tggtggaatc tgtggctcag atgtccacta ctgggagtat ggtcgaattg ggaattttat 180
tgtgaaaaag cccatggtgc tgggacatga agcttcggga acagtcgaaa aagtgggatc 240
atcggtaaaag cacctaaaac caggtgatcg tgttgccatc gagcctggtg ctccccgaga 300
aaatgatgaa ttctgcaaga tgggccgata caatctgtca ccttccatct tcttctgtgc 360
cacgcccccc gatgacggga acctctgccg gttctataag cacaatgcag cttttgttta 420
caagcttcct gacaatgtca ctttgagga aggcgccctg atcgagccac tttctgtggg 480
gatccatgcc tgcaggagag gcggagttac cctgggacac aaggctcttg tgtgtggagc 540
tgggccaatc gggatggtca ctttgctcgt ggccaaagca atgggagcag ctcaagtagt 600
ggtgactgat ctgtctgcta cccgattgtc caaagccaaag gagattgggg ctgatttagt 660
cctccagatc tccaaggaga gccctcagga aatcgccagg aaagtagaag gtcagctggg 720
gtgcaagccg gaagtcacca tcgagtgcac gggggcagag gcctccatcc aggcgggcat 780
ctacgccact cgctctggtg ggaccctcgt gcttggtggg ctgggctctg agatgaccac 840

```
cgtaccccta ctgcatgcag ccatccggga ggtggatata aagggcgtgt ttcgatactg 900
caacacgtgg ccagtggcga tttcgatgct tgcgtccaag tctgtgaatg taaaaccctt 960
cgtcacccat aggtttcctc tggagaaagc tctggaggcc tttgaaacat taaaaagg 1020
attgggggtg aaaatcatgc tcaagtgtga cccagtgac cagaatccct gatgttaatg 1080
ggctctgccc tcatccccac agtcttggga tctcaggga caatggctgg acatgggtgg 1140
gctctgatgc agaactttct cttttgaatg ttaagaataa ctaatacaat tcattgtgaa 1200
cagaagtcct taagcagagg aattggtgtg ccttaaagat acaatctggg atagtttggg 1260
ggaacttgta gccagaatgc cctgttcatt ctgagcaaag ttcagcaagt agagcagagt 1320
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tctggccctt gggtttcctg gttccactgc tactgaccca gaggggaatg agggctgagt 1440
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gccactcagg gtctgggatg aaggcttgtc agcacttcca gtttagaacg caatgtttct 1560
agagacatat tggctgtttg ttttgatgat aaaaggagaa taagaaaagg catcactttc 1620
ctggatccag gataattttt aaaccaatca aatgaaaaaa acaaacaac aaaaaaggaa 1680
atgtcatgtg aggttaaacc agtttgcatc cccctaattg ggaaaaagta agaggactac 1740
tcagcactgt ttgaagattg cctcttctac agcttctgag aattgtgtta tttcacttgc 1800
caagtgaagg accccctccc caacatgcc casccaccc ctaagyaygg tccctgttca 1860
ccaggcaacc aggaaactgc tacttgtgga cctcaccaga gaccaggagg gtttggttag 1920
ctcacaggac tccccccacc ccagaagatt agcatcccat actagactca tactcaactc 1980
aactaggctc atactcaatt gatggttatt agacaattcc atttctttct ggttattata 2040
aacagaaaat ctttcctctt ctcatocca gtaaaggctc ttggtatctt tctgttgtaa 2100
tgatttctat gaacttgtct tattttaatg gtgggttttt tttctggtta gattggacct 2160
aaatcgnatc atgcaactgt gacttgrcta tctcagatga gtatgtgct catcgtggct 2220
accttatctt attgcatgtg aagtagttag agctgttctg actggacgtt ccttggcggg 2280
gttgttgggg ggggatgtgt gtgaaaaata ttcggccgtt ggggggtccg gccgctgcat 2340
ggcatcctac gcctcgtggg ggcccctttg agcgcgcggt ggcccgtctt ctcggtccaa 2400
ggccgcgcgcg                                     2410
```

<210> 387

<211> 689

<212> DNA

<213> Homo sapiens

<400> 387

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agtaggcaga gtttacaag gtctaggatg acatctgggtg tattgactgt ggccagtctt 60
aaagctagtt tttgctatgt ggaacatgct gctctaattc agattttaaag agtttcttcc 120
tgttaattcg aagctcactg tgcctcttgt ttccgaggga agaaggactg attaagtcatt 180
ctaaatggat gcaataactga attacaggctc agaagatact gaagattact acacattact 240
gggatgtgat gaactatctt cggttgaaca aatcctggca gaattttaaag tcagagctct 300
ggaatgtcac ccagacaagc atcctgaaaa ccccaaagct gtggagactt ttcagaaact 360
gcagaaggca aaggagattc tgaccaatga agagagtcga gcccgctatg accactggcg 420
aaggagccag atgtcagatg cattccagca gtgggaagct ttgaatgact cagtgaagac 480
ggtgggtttc tcgctgggtg cgacgtgaat ttgtgaagct caggatgccc atggattaga 540
ctcatgtagt agcttaaaga gtcattaggc gataggaggg agaaaaccaa gaagttagca 600
gagtctggat ataattcagt gtccgtaaat cccatgaaga gaagctcatc agaataaagg 660
caatgaattt gtgcyaaaaa aaaaaaaaaa                                     689
```

<210> 388

<211> 798

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (215)

<223> n equals a,t,g, or c

<400> 388

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gctcctgccg ctcccgtgc cgcgcctcct gcggagaagg cccctgtaaa gaagaaggcg 120
gccaaaaagg ctgggggtac gcctcgtaag gcktcgggtc ccccggtgtc agagctcatc 180
accaaggctg tggccgcctc taaagagcgt aggangtttc tctggctgct ctgaaaaaag 240
cgttggtgct gcgcggctat gatgtggaga aaaacaacag ccgtatcaaa cttggtctca 300
agagcctggt gagcaagggc actctggtgc aaacgaaagg caccggtgct tctggctcct 360
ttaaactcaa caagaaggca gcctccgggg aagccaagcc caagggttaa aaggcgggcg 420
gaaccaaaacc taagaagcca gttggggcag ccaagaagcc caagaaggcg gctggcgggcg 480
caactccgaa gaagagcgct aagaaaacac cgaagaaagc gaagaagccg ccgcggccac 540
tgtaaccaag aaagtggcta agagcccaaa gaaggccaag gttgcgaagc ccaagaaagc 600
tgccaaaagt gctgctaagg ctgtgaagcc caaggccgct aagcccaagg ttgtcaagcc 660
taagaagcgg cgcccaagaa gaaatagcga acgcctactt ctaaaacca aaargctctt 720
ttcagagcca ccactgatct caataaaaga gctggataat ttctttaaaa aaaaaaaaaa 780
aaaaaaaaaa aaaaaaaaaa                                     798
```

<210> 389

<211> 1691

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (436)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1575)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1630)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1636)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1651)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1664)

<223> n equals a,t,g, or c

<400> 389

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atttgggcct tatatgtcaa gccctttggt ttccgtctta ttttaggggt tgttatgggg 60
scctgggtgg tcggcctcac atgggaaggg gatgggtagt ggatgggggt tctgttgat 120
cttgtgggcg ggtaattttg cttttgtttt tgttcacatt cttccccctc cacaagccaa 180
agtcgtttca tttggtttcc actgtgtgga ctgtgctgga gcttggcgcc tgccagaaaa 240
atttggggct aggcaagccc caggttgagc acatgggtgaa gcagagaaac tgttcttctg 300
gttcctgcac aacctcagag gggcaaaaac cctccccagg aaggaggagg gtgttcagga 360
gccagacttt tggagagaag gcagctccca gcctgctggg tgaccgccat tctgcgtgtg 420
ttccccagct gggcanggct ggaagcctta cgtatgaagc atggagaagc agccattgtc 480
cccactatgg gcagaggggg gaccggctg gcccttggg tcagactgga gccaacaccg 540
ccagccaccc cctctggctg ctggcaatgc cacagggtgcc caagaagatg gaggatccct 600
gtgccaggag ccaacctggt sttcccagg gtcagtgtcc cagtgaagac agaagcgaga 660
gaataaagtt ccctgtaggt cctctgtcac ctttgggttg tgtttttcaa ttgttgacat 720
ttcagagggg accctccaga agcccagccg gcttccccca aggactcccc cttcgtggtg 780
agtggatttc cacacgtgcc tttgatttcg gacagattgg gcctcacagc caccgattca 840
gctgccaggg tccctggact ggggggttgg gttttctata gaggaggaaa ggccctccct 900
caccctgctc cccaccagc cagggcagca tgggaccagc tgtctcagt ccttcaaac 960
ccacccccc cctacccta ccccaccaca ccccatccca gaggccttgc ctgggcaamc 1020
ctaagccct gtccctcgcc atacactgat gcctggcagc tagagcaaat ggctcgtgtt 1080
ctttgtcgaa gcctgtggtg agattgtttt gtttcctttt gttttgtgag tttgtttaaa 1140
attgaaatta gttattttct tctgctggac agtattaaat agagcaggat gttgagttaa 1200
tctgctagat tgcagtacta atggtagtgg tttagtgtct tcatgttaat attatttgta 1260
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caagggggaa gggcctgcag cctccgctcc tcaaatgtct gcactgaacc agttccagtc 1560
actaattgag ccaancaagg ccaggaagga attcaaaaaca tgttctggcc aagcacaaga 1620
acatccccan tgggantgga acacaatgct ncccaaaaac ctgnctttcc tggccttccc 1680
caacaactgg g 1691
```

<210> 390

<211> 454

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (425)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (444)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (451)

<223> n equals a,t,g, or c

<400> 390

```
gcgacggcgc tggcttgccc ggctgggaga gggcgtaagc aaaatgatgc ttcaacaccc 60
aggccaggtc tctgcctcgg aagtgagtgc ttctgccatc gtcccctgcc tgtcccctcc 120
tggttcactg gtgtttgagg attttgctaa cctgacgccc tttgtcaagg aagagctgag 180
gtttgccatc cagaacaagc acctctgcca ccggatgtcc tctgcgctgg aatcagtcac 240
tgtcagcgac agacccctcg ggggtgtccat cacaaaagcc gaggtagccc ctgaagaaga 300
tgaaaggaaa aagaggcgac gagaaagaaa taagattgca gctgcaaagt gccgaaacaa 360
gaagaaggag aagacggatg cctgcagaaa gtgagtgcct tctaacctta cccttctctc 420
gctangcctg tctttaccaa cttnatgtgg ntat 454
```

<210> 391

<211> 807

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (527)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (735)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (805)

<223> n equals a,t,g, or c

<400> 391

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caagctctaa tacgactcac tatagggaaa gctgggtacgc ctgcagggtac cgggtccggaa 60
ttcccggggtc gacccacgcg tccgggcgga aaaccgaagt tggaagtgtc tcttagcagc 120
gcgcggagaa gaacggggag ccagcatcat ggcagaacag gatgtggaaa acgatctttt 180
ggattacgat gaagaggaag agccccaggc tcctcaagag agcacaccag ctccccctaa 240
gaaagacatc aagggatcct acgtttccat ccacagctct ggcttccggg actttctgct 300
gaagccggag ctctcgcggt ccacgtgga ctgtggcttt gagcatcctt ctgagggtcca 360
gcatgagtgc attccccagg ccacctctgg catggacgtc ctgtgccagg ccaagtccgg 420
gatgggcaag acagcgggtc tcgtgctggc caccctacag cagattgagc ctgtcaacgg 480
acagggtgacg gtcttggtca tgtgccacac gagggagctg gccttcnaga tcagcaagga 540
```

```
atatgagcgc ttttccaagt acatgcccag cgtcaagggtg rgtcyntcgg ccagactgga 600
ccaggcgcca cttggkttct gmagctttgk tagcctcggc tctggcccar ccagcattta 660
ccaagcttgg caagggcagc tgcctttgaa ggtttgagc ggtttttgct ccttaaaagc 720
ctgattgaat tatgncatgg ctcccagggg cctgcgccag ttcccagcct ggggctgcct 780
ttgaaatggg aaccccggga aggcncct                                     807
```

<210> 392

<211> 927

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (916)

<223> n equals a,t,g, or c

<400> 392

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ctgcagcggg agctggatga ggccacggag agcaacgakg ccatggggcgc gaggtgaacg 60
cactcaagag caagctcagg cgaggaaacg agacctcttt cgttccttct agaaggtctg 120
gaggacgtag agttattgaa aatgcagatg gttctgagga ggaaacggac actcgagacg 180
cagacttcaa tggaaccaag gccagtgaat aagcaacttt ctacagtttt gcaccacggc 240
aagaaaacca aaaacaaaaa caaacaaca aaaaaaacc aacaacaacc cagaacaaag 300
caaaacccag cagactgtac ttagcattgt ctaaattccat tctcaaattc caaatatcac 360
agacacccct cmcacaggaa acttcgcagt gatgcaccag gcgaggaaac gagacctctt 420
tcgttccttc tagaaggctc ggaggacgta gaagttattg aaaatgcaga tggttctgag 480
gaggaaacgg acactcgaga cgcagacttc aatggaacca aggccagtga ataagcaact 540
ttctacagtt ttgcaccacg gcaagaaaac caaaaaccaa aacaaacaaa caaaaaaac 600
ccaacaacaa cccagaacaa agcaaaaacc agcagactgt acttagcatt gtctaaatcc 660
attctcaaat tccaaatatc acagacaccc ctacacaaag gaatatataaa accaccaccc 720
tccagcctgg gcaacgtagt aaaaacctca tctatacaag attttaaaaa taagctgggc 780
gtggtggtac acacctgtgg tcccagctac tagggaggct gagccaggaa gaacgstyca 840
gcccaggayt tcgrggctgc aatgagctat aattgcatca ttgcactcca gcctgggcaa 900
cagagaccct gttttnaacc accacca                                     927
```

<210> 393

<211> 1023

<212> DNA

<213> Homo sapiens

<400> 393

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ggcacgagcc accacgaggc caccaggggtg actgcgggat tccgatctgc gccggagctg 60
cgatgctaga gcaactcttg cccccacc ccacggacgt gttgcagtga tatcagaatt 120
ttgcgtgcgg tttaccctgt tttaacctct ttgcgtctcg cttctgaatc gtatccactt 180
gagcatcact agactgatct attttaacac tgggtggggg cagcgaggac atggttttta 240
actttaaaat gaaaatgtga aactaggaat gttgctgtga gacccttgg acaaacagat 300
ttttgcaact gggatagaac ttgagcaatt tctgtcttgg cctcgccact gacgtccctt 360
ctttcctgtg gggacaggat ggacagattc ctggtgaaag gggctcaagg gggccttttg 420
aggaagcagg aggagcaaga gccaactgga gaagagccag ctgtgttggg aggagacaaa 480
gaaagcacia ggaagaggcy caggagagag gcccaggga atggaggcca ctacgaggc 540
cctagctggc ggcacattcg ggctgagggc ctggactgca gttacacagt cctgtttggc 600
aaagctgagg cagatgagat tttccaagag ttggagaaag aagtagaata ttttacaggt 660
```


ataaagatgg ctgtgaccac atcgggggagc accgagatga tgaaagagaa ctggcccctg 720
ggagcccat tgcctctgtc tccttcggtg cctgcagaga ctttgtcttc cggcataagg 780
attcccgtgg gaaaagcccc tccaggaggg tggcgggtgg caggctgccg ctggcccacg 840
ggagcttact aatgatgaac caccgacca acacgcactg gtaccacagt cttcccgtga 900
gaaagaaggt tctggctcca cgggtgaatc tgacttttcg taaaattttg cttactaaaa 960
aataaaaaaca tttttaacag ttaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaa 1023

<210> 394

<211> 822

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (550)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (788)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (813)

<223> n equals a,t,g, or c

<400> 394

aaaaatttta aacaaagaaa ggaaaaaaat tgacaataaa agtcactctt ctaattgaat 60
atttttatat ttttatgaaa caaaagagca tttcttcagg tttctattgt atttttttta 120
acattcttgc agagaaagca agatccaaat tgattttggg atattaaaag ttaacagaac 180
actgaacaag gaaagaatgg catagatcta tctttacagt ctggagttaa ttcctgttaa 240
ctcattttat ccattcctta cataatcttc tttcctgtta gtccagtttg atgggtgtgaa 300
tggtgaattt caggcccagt tgctaaattt tgtggcatct tcctctagtc cttcccacct 360
ccagtcatca gccccactct gtcttggaaga caggcaggag gtgggggaag agctgaatct 420
ctttattttc cctggtagag acatcttcaa ggcataaaat agcttaaaga gcagagtaga 480
aatggaagag gctttgcaaa aggctagata actaacaaca cctgggttgg ggcggcggcc 540
tcttctcttn cagctccctt agcttggtc cgtaagtga tcacttgcca aatgctttag 600
atgattgcct ctcaataatt gaaagggtgg gtagttgta ttctaaatga tgtagaaggt 660
taaaaataat tacattatgc ttctattcta tcatctaaaa cmaatcatta aaactaattt 720
ctagctaaat kgttaattat aattatgctc agaatctatt aatgagctct gctggccttac 780
gactgcngt taagagaaat ctttacaaga ccnaggcctg aa 822

<210> 395

<211> 1702

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1694)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1696)

<223> n equals a,t,g, or c

<400> 395

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gcttcttttg tttctgatta tgttttctgc agagagacac gggctcaagg aacccaagag 60
agtggaagaa ctgcaaaaaca agattgtaaa ttgtctcaaa gaccacgtga ctttcaacaa 120
tggggggttg aaccgccccca attatttgts caaactgttg gggaagctcc cagaacttcg 180
taccctttgc acacaggggc tacagcgcat tttctacctg aaattggaag acttggtgcc 240
accgccagca ataattgaca aacttttctt ggacacttta cttttctaag acctcctccc 300
aagcacttca aaggaactgg aatgataatg gaaactgtca agagggggca agtcacatgg 360
gcagagatag ccgtgtgagc agtctcagct caagctgccc cccattttctg taaccctcct 420
agcccccttg atccctaaag aaaacaamca aacaaacaaa aactgttgct atttcctaac 480
ctgcaggcag aacctgaaag ggcatttttg ctccggggca tcctggattt agaacatgga 540
ctacacacaa tacagtggta taaacttttt attctcagtt taaaaatcag tttgttggtc 600
agaagaaaga ttgtataaak gtataatggg aaatgtttgg ccatgcttgg ttgttgccagt 660
tcagacaaat gtaacacaca cacacataca cacacacaca cacacacaga gacacatctt 720
aaggggaccc acaagtattg cccyttaaca agacttcaaa gttttctgct gtaaagaaag 780
ctgtaatata tagtaaaact aaatgttgcg tgggtggcat gagttgaaga aggcaaaggc 840
ttgtaaatth acccaatgca gtttggtctt ttaaattatt ttgtgcctat ttatgaataa 900
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tgtcagttaa tttattatth tgtttgagta agaattttta tattgccata ttctgtagta 1440
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tgtatgacag ttagagatgc tgattttttt tctgataaat tctttctttg agaaagacaa 1560
ttttaatgth tacaacaata aaccatgtaa atgaaaaaaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1680
aaaaaaaaag gggngnccgt tt                                     1702
```

<210> 396

<211> 858

<212> DNA

<213> Homo sapiens

<400> 396

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cttgggcctc tgacatgact tatgtgtgtg tgtgtttttg ggggtggggag ggagggagag 60
aagagggggc taaatttgat gctttaactg atctccaaca gttgacaggt catccttgcc 120
agttgtataa ctgaaaaagg acttttctac caggtatgac cttttaagtg aaaatctgaa 180
ttgttctaaa tggaaagaaa aaaagtgtga atctgtgccc ttcattgggg acattcctct 240
aggactggtt tggggacggg tgggaatgac ccctaggcaa ggggatgaga ccgcaggagg 300
aaatggcggg gaggaggcat tcttgaactg ctgaggatgg ggggtgtccc ctcagcggag 360
```

gccaagggag gggagcagcc tagttggtct tggagagatg ggggaaggctt tcagctgatt 420
tgcagaagtt gcccatgtgg gccccagcca tcagggctgg ccgtggacgt gcccctgccc 480
actcacctgc ccgcctgccc gcccgcgcgc atagcacttg cagacctgcc tgaacgcaca 540
tgacatagca cttgccgata tgcgtgtgtc cagaagggtgc ccttggccga gcgccgaact 600
cgctcgccct ctagatgtcc aagtgccacg tgaactatgc aatttaaagg gttgaccac 660
actagacgaa actggactcg tacgactctt tttatatattt ttatacttga aatgaaatcc 720
tttgcttctt ttttaagcga atgattgctt ttaatgtttg cactgattta gttgcatgat 780
tagtcagaaa ctgccatttg aaaaaaagtt atttttatag cagcaaaaaa aaaaaaaaaa 840
rakcaaaggw tttcattt 858

<210> 397

<211> 1110

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (996)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1100)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1106)

<223> n equals a,t,g, or c

<400> 397

cggctgggct gcggaacgc ggccggtccg gttccgcggc ccaggcagag ggactctgca 60
agcaatggct gcagcgcgcc tggcaagagc ggcgcctgct gctgcgggag ccgcgctaca 120
cgctgctggt ggccgcctgc ctctgcctgg cggagggtgg catcaccttc tgggtcattc 180
acagggtggc atacacagag attgactgga aggcctacat ggccnaggta gaaggcgtca 240
tcaatggtac ctatgactat acccaactgc aggggtgacac cggaccactt gtgtaccag 300
ctggtttcgt gtacatcttt atggggttgt actatgccac cagccgagggc actgacatcc 360
gcatggccca gaacatcttt gctgtgctct acctggctac cttgctgctt gtcttcttga 420
tctatcacca gacctgcaag taacctccct tcgtcttttt cttcatgtgc tgcgcctctt 480
accgtgtcca ctccatcttt gtgctgcggc tcttcaatga ccagtgggc atgggtgctgc 540
tcttcctcag tatcaacctc ctgctggccc agcgtgggg ctggggttgc tgctttttca 600
gcctggcagt ctctgtgaag atgaatgtgc tgctcttcgc ccctgggtta ctgtttcttc 660
tcctcacaca gtttggcttc cgtggggccc tccccaaagt gggaatctgt gctggccttc 720
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tgctgtttgc cctctgcagg tggcacagga caggggaaag tatcttgtcg ctgctgaggg 960
atccctccaa aaggaagggtt ccaccccagc cccttnacac ccaaccagat cgtttytaac 1020
ccttttcaac tccaatttca ttgggsatct ggtttcagsc gkttccttcc attaacagtt 1080
tttaagggtt gggtattttt caaaanattg 1110

<210> 398

<211> 864

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (823)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (830)

<223> n equals a,t,g, or c

<400> 398

gcggcacgtg gcgcgggtgc ggggcgtgga gtggcgtggc gtggagtggc gtggcgtggc 60
ggggtctcgc ggcgcgggcg cgcacccgga gctgtggacg gagagtgcct ccctctggcc 120
tcagtttctc catgttgtag tagcggacat ggcccggacc ggccscgag accgccccgt 180
gcaacctcac cgccagcctg ggggcctcag cgactgggac gggaccaagg ggctcgggga 240
ttctccctgc cccgggccct ggtgcgtgac tgaccctcct gttcccagag cccccagcgc 300
argccgggat gttcgtcctg gtggaaatgg tggacaccgt ccggatcccc cttgggcagt 360
ttgagaggaa gctcaacgac tccattgccc aggagctgaa caagaagttg gccaacaagg 420
tcgtgtacaa cgtgggactc tgcatttgtc tgtttgatat caccaaactg gaggatgcct 480
atgtattccc tggggatggc gcatcacaca ccaaagtcca ttttcgctgc gtggtgtttc 540
atccattcct agatgagatt ctcatggga agatcaaagg ctgcagccca gaaggagtgc 600
acgtctctct aggtctcttc gatgacattc tcatccccc agagtcactg cagcagccag 660
ccaagttcga cgaagcggag caggtgtggg tgtgggagta cgagacggag gaaggagcac 720
acgacctcta catggacacc ggcgaggaga tccgcttccg ggtgggtggac gagagctttg 780
ttgacacgtc cccacargg ccagytcag cagatgccac cantttccan tgargagctg 840
ccaaagaagg aggtccggtt acac 864

<210> 399

<211> 271

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (251)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (263)

<223> n equals a,t,g, or c

<400> 399

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tggatttttta taaggccaga catttacctc tggtaatctc ttgagccatg tgtttcattt 60
ttatgctcac agaataattt ggtgtaatgg ggcttatyaa cccaaatttc agaactttaa 120
attcatgtat ctttttctac actgatgact atactcaaag catcttactt taattatata 180
aatgtatata ctgtctttct caactggggt ttcaagagag aattaagccc aaaataaaat 240
aatttgtgtg ngcttatttt ctncattttt c 271
```

<210> 400

<211> 925

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (54)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (364)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (635)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (900)

<223> n equals a,t,g, or c

<400> 400

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ctcgtgccga attcggcacg agcasgagcg cgtgctcagt gtgctgggta cagncgactc 60
cgggacaggg ggtctcggcc gtcggcgctca tggtttcgcy cgtgcagctc ccgcctgaga 120
tccagctggc tcagcgccctg gcgggggaatg agcagggtgac ccgggaccgg gcggtgagga 180
agctccggaa atacatcgct gccaggactc agcggggccgc agtggtttta cgcacgacga 240
gctgctgaag gtgtggaaag gactgtttta ttgcatgtgg atgcaggaca agccactcct 300
ccaggaagaa ttaggaagga ctatttccca gctcgttcac gcttttcaga ccacggaggc 360
gcanacctgt tccttcaggc cttctggcag accatgaatc gcgagtggac gggcattgac 420
aggctgcgct ggataaattc tacatgctca tgcggatggt cctgaacgag tccttgaagg 480
ytctgaagat gcaaggctgg gaagaaagac agatcgagga gctgctagag ctgctgatga 540
ctgaratcct gcaccccgac agccaggccc ccaacgggtg gaagagccac ttcacgaga 600
tcttcctgga ggagctgacc aaagtgggcy ccgangsagc ttacggcaga ccagaacctg 660
gaagttcatc gacccttct gcagaatcgc tgcccggacc aaggattcct tggttttgaa 720
```

caacatcact cgaggcatct ttgagacgat tgtggagcag gccccgcttg ccattgaaga 780
cctcctgaat gaactggaca cacaggatga ggaggtggcg tcggacagtg atgagtcctc 840
tganggcggt gaacgttgag acgcgctgtc ccagaagagg tctgagaagc cgccccgagn 900
ttccatctgc agggctgaac ctgag 925

<210> 401

<211> 1085

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (774)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1080)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1085)

<223> n equals a,t,g, or c

<400> 401

cggacgcgtg ggtgctgggg ctgcagmgct gcctccgaga ccgcgagggtg ggtggagcgg 60
gtcttccttg aagggtgcga taaggccggg cgagggtgcct gggatgcttc tccccctccg 120
cgaggaagag atctaattgg gtagggcggg ttagactag cctgccgagc cgccccgtgg 180
cacctgcagc ctcttggggc cccgccgggc cccggcgaga aagttgttaa agggagcag 240
gtggttgctc ctgggggtccg aggcgcgcct ctcacgccct gcccaacaga agccgcagtc 300
ccgtgggggtc tggagacgca gtttcctggt aatgacaata aatccctgct cccccctgcct 360
cagacatcta cgcagcgaat tcgagcctgg ccttgagggt ccacaccgcg aggggaagatg 420
cgtgcgcccc ttccagagcc taagcctgga gacctgattg aratttttcg ccccttctac 480
agacactggg ccatctatgt tggcgatgga tatgtggttc atctggcccc tccaagtga 540
gtcgcaggag ctggtgcagc cagtgtcatg tccgccctga ctgacaaggc catcgtgaag 600
aaggaattgc tgtatgatgt ggccgggagt gacaagtacc aggtcaacaa caaacatgat 660
gacaagtact cgccgctgcc ctgcagcaaa atcatccagc gggcggagga gctggtgggg 720
caggaggtgc tctacaagct gaccagtga aactgcgagc actttgtgaa tganctgcgc 780
tatggagtcg cccgcagtga ccaggtcaga gatgtcatca tcgctgcaag cgttgcagga 840
atgggcttg cagccatgag ccttattgga gtcattgtct caagaaacaa gcgacaaaag 900
caataactga aaaagactgt cctgtcagcg atgactttat acatcaaggg ggtccttgttt 960
tgctagagag tttgggggtt gggttgtgga ttctattgtg atttataata aggccttatt 1020
tcacagaata aaataaagca aaacgaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
ggggn 1085

<210> 402

<211> 348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (65)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (149)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (308)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (343)

<223> n equals a,t,g, or c

<400> 402

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ctttcccaa cccckggsc cggggggttt gggcccggg gcccccgggc ctttccttta 60
aaggnaaaac ccttwaaggg tttggggaaa ttcccccccc ccgggggggg gccctttgcc 120
caaaggggaa aaattttccg ggggccaanc cggaaaggcc caaaaaaagg ttcccccccg 180
ggaaggaatc ccggttgga attgttaaaa ccaaaagggg aattttgaag gccggaaatt 240
cgggttgccc cccaacttcc cccaacattc ccgggggggac ttgggggctg gaacgatgcc 300
ttgggagntc tcggcaagct tcgcaaggct gggttggtcag ctngcgca 348
```

<210> 403

<211> 1470

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (4)

<223> n equals a,t,g, or c

<400> 403

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tggngctcca ccgcggtgac gaccgctcta gaactagtgg atcccccggg ctgcaggaat 60
tcggcagagg cagwgccggc gtgggcggcc ggccgaggcg gaggcgcagg aagggggckg 120
cgagtcgtgc gaggtgccc ttctcactca gcattatgga tccaagcctg ttgagagaaa 180
gggagctggt caaaaaacga gctctttcta ctctgtagt agaaaaacgt tcagcatctt 240
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caggctctaa acaaaattct gatcatagca atggatcatt taacttgaaa gctttgtcag 360
gaagctctgg atataagttt ggtgttcttg ctaagattgt gaattacatg aagacacggc 420
atcagcgagg agatacgcat cctctaacct tagatgaaat tttggatgaa acacaacatt 480
tagatattgg actcaagcag aaacaatggc taatgactga ggctttagtc aacaatccca 540
aaattgaagt aatagatggg aagtatgctt tcaagcccaa gtacaacgtg agagataaga 600
aggccctact taggctctta gatcagcatg accagcgagg attaggagga attcttttag 660
aagacataga agaagcactg cccaattccc agaaagctgt caaggctttg ggggaccaga 720
```

```
tactatttgt aaatcgtccc gataagaaga aaataactttt cttcaatgat aagagctgtc 780
agttttctgt ggatgaagaa tttcagaaac tgtggaggag tgtcactgta gattccatgg 840
acgaggagaa aattgaagaa tatctgaagc gacaggggtat ttcttccatg caggaatctg 900
gaccaaagaa agtggcccct attcagagaa ggaaaaagcc tgcttcacag aaaaagcgac 960
gctttaagac tcataacgaa cacttggtg gagtgtgtaa ggattactct gacattactt 1020
ccagcaaata gggaacagtt ttgccctgga acagagttac agatacacia tcaagagtgt 1080
tcttgctgat gctcggggtc tgaagactgt cttcctatct gcttcttgcg gctgaggaga 1140
ggagcagttc agtttaciaa acaagtgcaa attaccaaac tcaaagctta tttgagtaga 1200
atgggctcat gggcaatgtg atgttccctg ttaaccttct gttactccct gggagaaagg 1260
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gttccctttt tcctcgttt ttactttaga gcaagtgtgc ccatagtctt gaatgcaata 1380
tttgttttatt ccaaaagaac atatttataa taaaatcact gtagaaggat taaaaaaaaa 1440
aaaaaaaaaa aaaaaaaaaa aggggagggg 1470
```

<210> 404

<211> 2487

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (78)

<223> n equals a,t,g, or c

<400> 404

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tgcggcgcgc ggtcctccct ccacctctc ctgcggcccc cctcgcttcc ctccctccac 60
ttcccagact ccggcgtngt cccggccacg ctgcagcgtg ctgcaggaac aaaggaagac 120
cccgcggcgg cgcggcgcca cctccgcctg ctgctccgac ccgctcccgg cccgcggcgg 180
cggcaccagg gcgcccggct cagccttccc ggaggcctcg gcccggcctc atcgtgccgg 240
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gagactaacc agaccccggt gcccatgctg tgtagcacag gatgtggctt ttatggaaat 360
cctaggacaa atggaatgtg ttcagtttgc taaaaagaac atcttcagag gcagcaaaat 420
agtggcagaa tgagcccaat ggggacagct agtggttcca acagtcctac ctcagattct 480
gcatctgtac agagagcaga cactagctta acaactgtg aagggtgctg tggcagcaca 540
tctgaaaaat caagaaatgt gcctgtggct gccttgccctg taactcagca aatgacagaa 600
atgagcattt caagagagga caaaataact accccgaaaa cagaggtgtc agagccagtt 660
gtcactcagc ccagtccatc agtttctcag ccagtgactt ctcagagtga agaaaaagct 720
cctgaattgc ccaaaccaaa gaaaaacaga tgtttcatgt gcagaaagaa agttggctct 780
acagggtttg actgccgatg tggaaatttg ttttgtggac ttcaccgtta ctctgacaag 840
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gaccttcttt ccggtgaaac cagtatttgg cgccatatat aagcctggtt aaattggtca 1500
tctaaagctg tcaaaataaga cattctgtga aaggtaaaca tcgaaactgg ttataagtaa 1560
```



```
aaccatcaag ccaacaacag ggtcttgaga taacctttga agcttattgt actggcctgc 1620
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catatttatg tattgcacat aatcatgcta ttcagcattg atgctatatt gtattatgta 2400
aataataaaa gccatgtaca gagggaaaaa aaaaaaaaaa aaaaaaaac tcgagactag 2460
ttctctctct ctctctctcc tcgtgcc                                     2487
```

<210> 405

<211> 1256

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1180)

<223> n equals a,t,g, or c

<400> 405

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agtttttggt ccgctccgca gcgctcttcc cgggcaggag ccgtgaggct cggaggcggc 180
agcgcggtcc ccggccagga gcaagcgcgc cggcgtgagc ggccggcgga aaggctgtgg 240
ggaggggggt tcgcagatcc ccgagatgcc ggagttcctg gaagaccctt cggtcctgac 300
aaaagacaag ttgaagagtg agttggctgc caacaatgtg acgctgccgg ccggggagca 360
gcgcaaaagac gtgtacgtcc agctctacct gcagcacytc acggctcgca accggccgcc 420
gctccccgcc ggcaccaaca gcaaggggcc cccggacttc tccagtgcag aagagcgcga 480
gcccaccccg gtcytcgggt ctggggccgc cggcgccggc cggagccgag caccgtcggc 540
aggaaagcca caaaaaaac tgataaaccc agacaagaag ataaagatga tctagatgta 600
acagagctca ctaatgaaga tcttttggtt cagcttgtga aatacggagt gaatcctggt 660
cctattgtgg gaacaaccag gaagctatat gagaaaaagc ttttgaaact gagggaacaa 720
ggaacagaat caagatcttc tactcctctg ccaacaattt cttcttcagc agaaaaataca 780
aggcagaatg gaagtaatga ttctgacaga tacagtgcga atgaagaagg aaagaagaaa 840
gaacacaaga aagtgaagtc cactagggat attgttcctt tttctgaact tgggaactac 900
tccctctggt ggtgggattt tttcagggtt tttcttttcc tgaaatctcc acccgtcctc 960
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ctgaaaggaa tttgtttatt tcatgcaagt ctagccatga taggtgttta gaggaaaagt 1140
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<210> 406

<211> 771
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (200)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (205)
<223> n equals a,t,g, or c

<400> 406
gttcttcttaa atcaggaatg gattgaaatc taatgaaccg aaacttttggg tacttcggcc 60
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ccagggacac ccaattcatc gtaatcatca tgaataatca aaaagtggta gctgtgctac 180
tgcaagagtg caagcaagtn ctggntcagc tcttgttgga agcgccagat gtgtcggaag 240
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tactggcgctc cctgagggcc tccatcctcg ctccggactg tgcggctgcg gcggctattg 480
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ccaaaggtct ccacaagttg cagccagcca cgccaattgc cccgcagggtg gttattcgcc 600
aagcccgaat ctccgtgaay tcaggaaaac ttttaaaagc agagtatatt ctgagcagtc 660
taataagcaa caatggagca acgggtacct ggctgtacag aaatgaaagt gacaagggtcc 720
tggtgcagtc ggtctgtata cagatcagag ggcagattct gcaaaagctg g 771

<210> 407
<211> 2643
<212> DNA
<213> Homo sapiens

<400> 407
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aaggacatga gaaaggcgtg aattgcattg attactacag tgggtggggac aagccatacc 120
tcatttcagg tgcagatgac cgtcttggtta aaatatggga ttatcagaat aaaacatgtg 180
tgcagacact ggaaggacat gcccaaaatg tgtcttggtc cagctttcat cctgagttgc 240
caatcattat cacaggttca gaagatggaa cagtacgtat ttggcattca agcacctacc 300
ggcttgagag cacactgaat tatggaatgg agaggggtatg gtgcgtggcc agtctaagag 360
ggtcaaacaa tgctcgctttg ggctatgatg aagggagcat cattgttaag cttggctcgg 420
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tccagcaggc caacctaaaa gcaatgggag atgctgaaat taaagatggg gaaagattgc 540
cactggcagt aaaggatatg ggcagttgtg aaatataccc tcagactatt cagcacaatc 600
ctaattggcg gtttgtggtg gtgtgtggtg atggggagta tatcatctac acagcaatgg 660
cattgagaaa caagagcttt ggatctgctc aggagtgttc atgggcccac gattcttcag 720
agtatgcaat aagagagagc aacagcattg taaagatatt taagaacttt aaggaaaaaa 780
aatcatttaa accagatttt ggagcagaaa gtatctacgg cggcttctta ttgggagtc 840
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aaattcagcc caaacatatt ttctgggtctg actctggaga gctagtctgt attgctactg 960

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aaattgtgaa aacagggcctt tgggtaggcg attgcttcat ttacacaagt tctgtgaaca 1140
gattaaatta ttatgttgga ggagaaatag tcaccattgc ccacttggac aggacgatgt 1200
atctcctagg ctacattcct aaagacaaca ggctttatct gggggataaa gaattgaaca 1260
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gtttcctttc tcaataatga aaataggcct ctagttttag aaggctgagc cgaaactaca 2580
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tgt 2643
```

<210> 408

<211> 1646

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (55)

<223> n equals a,t,g, or c

<400> 408

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caacactgtg gttatgaagg tggcagagca gacccccctc tctgccctgt atttngcctc 60
cctcatcaag gaggcaggct ttccccctgg ggtggtgaac atcatcacgg ggtatggccc 120
aacagcaggt gcggccatcg ccagcacat ggatgttgac aaagtgtcct tcaccggttc 180
caccgaggtg ggccacctga tccagaaagc agctggcgat tccaacctca agagagtcac 240
cctggagctg ggtggtgaaga sccccagcat cgtgctggcc gatgctgaca tggagcatgc 300
cgtggagcag tgccacgaag ccctgttctt caacatgggc cagtgtgct gtgctggctc 360
ccggaccttc gtggaagaat ccatctacaa tgagtttctc gagagaaccg tggagaaagc 420
aaagcagagg aaagtgggga acccctttga gctggacacc cagcaggggc ctcaggtgga 480
caaggagcag tttgaacgag tcctaggcta catccagctt ggccagaagg agggcgcaaa 540
actcctctgt ggcggagagc gtttcgggga gcgtggtttc ttcacaaagc ctactgtctt 600
```

```

tggtggcgtg caggatgaca tgagaattgc caaagaggag atctttgggc ctgtgcagcc 660
cctggttcaag ttcaagaaga ttgaggaggt ggttgagagg gccacaaca ccaggatatg 720
cctggctgcg gctgtgttca cccgggatct ggacaaggcc atgtacttca cccaggcact 780
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aggcaaagaa tatgcttaca tgattacacc tgtaaagtaa gcccaaacat yccaaatgtc 1560
catcaactga tgagtggatt aataaaatgt ttccatggaa aaaaaaaaaa aaaaaaaaaa 1620
aaaaaaaaa aaaaaaaaaa aaaaaa 1646

```

<210> 409

<211> 876

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (146)

<223> n equals a,t,g, or c

<400> 409

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cacactgact cgagtgaat ttggtgccgt gactaggatc gggggacctc ccttgggaga 120
tcaatcccc gtcctcctac acttttctct gtgagaaaga tccacctaca acctcaggct 180
ctcagaccra ccagcccaag aaacatctca ccaatttcaa atctggcacc cactggaaat 240
cagactgccc agctcgccc acagccactc ctggagcccc taaagctcta gcccagggt 300
ctctgactcc ttcccagatc tattcggtt agcgactgaa gattgacgt gcccgatcgc 360
ctcggagtc ccttgacca tcacagaagc cgagcttcgg gtaactctca cagtggaggg 420
taagtccatc cctgttttaa tcgatacggg ggctaccac tccacgttgc cttcttttca 480
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cctgaaaact cccctactct ggtgccaaact tggacaacac tcttttatgc actctttttt 600
agttatcccc acctgccac ttcccttatt aggcggaaat attttaacca aattatctgc 660
ttccctgact attcctggag tacagctaca tctcattgct gcccttcttc ccaatccaaa 720
gcctcctttg tgcctctaa catccccaca atatcaccac ttaccacaag acctcccttc 780
agcttaatct ctccactct aggttccac gccgccccta atccacttg aagcagccct 840
gagaaacatc gtccattctc tctccatacc accccc 876

```

<210> 410

<211> 1850

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1817)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1848)

<223> n equals a,t,g, or c

<400> 410

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gcccacgcgt ccgcgagcgc gtggggccat ttttgctgcc cggacgcgga gcgagaggct 60
gagagagtcg gagacactat ccgcttccat ccgtcgcgca gaccctgccg gagccgctgc 120
cgctatggat gatcgagagg atctggtgta ccaggcgaas ctggccgagc aggctgagcg 180
atacgacgaa atggtggagt caatgaagaa agtagcaggg atggatgtgg agctgacagt 240
tgaagaaaga aacctcctat ctgttgcata taagaatgtg attggagcta gaagagcctc 300
ctggagaata atcagcagca ttgaacagaa agaagaaaac aagggaggag aagacaagct 360
aaaaatgatt cggaatatc ggcaaattgt tgagactgag cttaaagttaa tctgttgtga 420
cattctggat gtactggaca aacacctcat tccagcagct aacactggcg agtccaaggt 480
tttctattat aaaatgaaag gggactacca caggtatctg gcagaatttg ccacaggaaa 540
cgacaggaag gaggctgcgg agaacagcct agtggcttat aaagctgcta gtgatattgc 600
aatgacagaa cttccaccaa cgcctcctat tcgcttaggt cttgctctca attttccgt 660
attctactac gaaattctta attcccctga ccgtgcctgc aggttgcaa aagcagcttt 720
tgatgatgca attgcagaac tggatacgct gagtgaagaa agctataagg actctacact 780
tatcatgcag ttgttacgtg ataactctgac actatggact tcagacatgc agggtgacgg 840
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```

<210> 411

<211> 661

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (518)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (660)

<223> n equals a,t,g, or c

<400> 411

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acactataga aatgtacgcc tgcaggttac cgggccggaa attccccgggt cgacccacgc 60
gtccgggtggt tgactctgag gatctgcccc tgaacatctt cccgagaaat gctccagcag 120
agcaaaatct tgtaaagtca ttcgcaaaaa cattgttaag aagtgccttg agctcttctc 180
tgagctggca gaagacaagg agaattacaa gaaattctat gaggcattct ctaaaaatct 240
caagcttgga atccacgaag actccactaa ccgccgccgc ctgtctgagc tgctgcgcta 300
tcatacctcc cagtctggag atgagatgac atctctgtca gagtatgttt ctgcgatgaa 360
ggagacacag aagtccatct attacatcac tggtgagagc aaagagcagg tggccaactc 420
agcttttgtg garcagagtgc ggaaacgggg cttcsaagtg gtwtatatga mcgarcccat 480
tgacrartwc tgtgtgcagc arctcmagga atttgawngg aararmctgg tcycagttac 540
caaggaggtc tggarctgcc tgaggtnnag gagagaagaa gaagatggaa gagagcaagg 600
caagtttaga ccttgacgct ctgaagaatc ttagttaaag ttagaagngc atcccatagn 660
t                                                                 661
```

<210> 412

<211> 1263

<212> DNA

<213> Homo sapiens

<400> 412

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tctcagttca taggctatcc catcacctt tatttgagga aggaacgaga gaaggaaatt 180
agtgatgatg aggcagagga agagaaaggt gagaaagaag aggaagataa agatgatgaa 240
gaaaagccca agatcgaaga tgtgggttca gatgaggagg atgacagcgg taaggataag 300
aagaagaaaa ctaagaagat caaagagaaa tacattgatc aggaagaact aaacaagacc 360
aagcctatct ggaccagaaa ccctgatgac atcacccaag aggagtatgg agaattctac 420
aagagcctca ctaatgactg ggaagaccac ttggcagtca agcacttttc tgtagaaggt 480
cagttggaat tcagggcatt gctattttatt cctcgtcggg ctccctttga cctttttgag 540
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aacaagaaga aaaagaacaa catcaaactc tatgtccgcc gtgtgttcat catggacagc 600
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gag 1263

<210> 413

<211> 1337

<212> DNA

<213> Homo sapiens

<400> 413

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<210> 414

<211> 792

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (744)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (783)

<223> n equals a,t,g, or c

<400> 414

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ttgctgcgtc ttacatccag tctgacgaca aaaggagctt catctttcaa gataaccctg 420
ggaattgaag cagttggtgg caaattaagt gtgaccgcaa caagggaaaa catggcttat 480
actgtggaat gcctgcgggg tgatgttgat attctaattg agttcctgct caatgtcacc 540
acagcaccag aatttcgtcg ttgggaagta gctgacctc agcctcagct aaagattgac 600
aaagctgtgg cctttcagaa tccgcagact catgtcattg aaaatttgca tgcagcagct 660
taccggaatg ccttggtcta tcccttgkat tgtcctgact ataggattgg aaaagtgaca 720
tcagaggagg taccaakraa actntaaaga aattggcgct agaatacttg gagcaatggc 780
agnatcaata ga 792
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<210> 415

<211> 1342

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1036)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1038)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1099)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1181)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1224)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1246)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1255)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1338)

<223> n equals a,t,g, or c

<400> 415

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tcgcttccccg gcgcgggtcgc agccctcagc ccacttagga taatggcgac agctgaggta 180
ctgaacattg gtaaaaaatt atatgagggt aaaacaaaag aagtctacga attgttagac 240
agtccaggaa aagtcctcct gcagtccaag gaccagatta cagcaggaaa tgcagctaga 300
aaaaaccacc tgggaaggaaa agctgcaatc tcaaataaaa tcaccagttg tatttttcag 360
ttattacagg aagcaggat taaaactgcc ttcaccagaa aatgtgggga gacagctttc 420
attgcaccgc agtgtgaaat gattccaatt gaatgggttt gcagaagaat agcaactggg 480
tcttttctca aaagaaatcc tgggtgtcaag gaaggatata agttttaccc acctaaagtg 540
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gctgcaaat tttgctttgc tggacttctt ataggccaga ctgaagtga tatcatgagt 660
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```

<210> 416

<211> 1113

<212> DNA

<213> Homo sapiens

<400> 416

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tattcctgga agaattgtgtc cagctaccca aaaactaata gaagagtcac agagaaaaat 840
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aaagaaaaga aaagaaagga aagaaaagaa aac 1113

<210> 417

<211> 1174

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (7)

<223> n equals a,t,g, or c

<400> 417

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tgcaggcaaa accactcttc ttcacatgct caaagatgac agattgggccc aacatgttcc 300
aacactacat ccgacatcag aagagctaac aattgctgga atgaccttta caacttttga 360
tcttggtggg cagcagcaag cacgtcgcgt ttggaaaaat tatctcccag caattaatgg 420
gattgtcttt ctggtggact gtgcagatca ttctcgcctc gtggaatcca aagttgagct 480
taatgcttta atgactgatg aaacaatatc caatgtgcc aaccttatct tgggtaacaa 540
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<210> 418

<211> 673

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (506)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (586)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (618)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (661)

<223> n equals a,t,g, or c

<400> 418

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ctcagccccg cggacgcatg tccccttgcc gagttgaggg cagctggcct agagcctgtg 180
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<210> 419

<211> 2178

<212> DNA

<213> Homo sapiens

<400> 419

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aagggagaga gtgggagttt cccagcccgc agaactttcg aagttgagaa ragaaccctt 180
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agcatattta tgaacatatt tcttaataag aaaaatatcc attttattac cattttctat 2100
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gaaaaaaaaa aaaaaaaaaa 2178
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<210> 420

<211> 1884

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (56)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (283)

<223> n equals a,t,g, or c

<400> 420

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catgtcattt agaagttagt ttgkatatat tattataatc ttataattgt tctmagaatc 1800
ccttaacagt tgtatttaac agaaattgta tattgtaatt taaaataatt atataactgt 1860
atttgaaata agaaaaaaaa aaaa 1884
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<210> 421

<211> 622

<212> DNA

<213> Homo sapiens

<400> 421

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acagccagtg tccctggccag atgaaatgct gccgcaatgg ctgtgggaag gtgtcctgtg 420
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tgccctggccc tgcattctggt tccagcccac ctgccctccc ctttttcggg actctgtatt 540
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aaaaaaaaaa aaacttgagg gg 622
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<210> 422

<211> 1285

<212> DNA

<213> Homo sapiens

<400> 422

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ctatatatta aagcagaaat ataaccacaa aaaaaaaaaa aagggsggcc scyctagagg 1260
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<210> 423

<211> 528

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (442)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (489)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (510)
<223> n equals a,t,g, or c

<400> 423
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cctagacccc gactcccttt ggctcagccc gcgcgccccca ggcccggccc gggcggcgcg 180
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aatgcaagag tccttgtagc tntacttcag caattactac agattgatga aggaagaata 480
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<210> 424
<211> 3118
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (388)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (485)
<223> n equals a,t,g, or c

<400> 424
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acggccctag ctttgggaaag ccagaggaca cccttggtc ctgccgacac cgccctcctt 180
cccttcccag ccgcgggcct cgctcggtgc taggctactc tgccgggagg cggcggcggc 240
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ggccgagaga gctcggtgcc cgcccttccg ctgcgctttt tcgtcagctg gctggagcag 360
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acgggcggag acttcgggaa tccgctgagg aaattcaagc tgggtgttcct gggggagcaa 480
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caaactacaa agtggattga tgatgtcaga acagaaagag gaagtgtatg tatcatcatg 780
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agtgtcttta taatacaata taattgttaa aggcaagggg tgactctttg ttttattttg 3000
acatggcatg tcctgaaata aatattgatt caatatggca aaaaaaaaaa aaaaaaaaaa 3060
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<210> 425

<211> 1410

<212> DNA

<213> Homo sapiens

<400> 425

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ctaaatttta cctcatttat taatctgggc attaaggaat atatttaata atattatgta 180
attattcttt ttatgcatga tacacctaga aaaatgcctt ttgtttctat tgatggcttt 240
gttgtttgga gctacttttg attacttatt gcagtttccc aatttagtct ttactttatc 300
taactcacia agtaaaatta actgatcaca tggcaactac tgtattttaa tagttctgga 360
aaaatgaaag tgctttttgc tgcttggtaa atgggtaatg cccttgattc cttgactgta 420


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ggacatagct gatctaaagt actctgtcag ttttaccttc acccatgact gtcattagtt 480
gtcaaagttg aaaagtactt tagctgtgag aaatccttgt atgtttttat tataagaggt 540
ataatcatcc tcaaagcctg tttttattac atgatgtgga ctgattattt tttctatcac 600
agtgttaaca gatggatttt attgtaaata caaagaaaac atattgatta ttgtagtatt 660
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ttcttattgc ccagagactg actgatacat cttttgttat tttacacat aaattaaaca 780
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tcaagaaagg acccttcagc aaggctgtac cctcaatgca gttgatggcc tgtcttcacg 1140
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caagaagaca agcatctgtg gtgcggaggc aagcaggcta actaggagtt gacaagctaa 1260
gaaagtgaag ctgttctttt ttagttaact gtcttctctt ggagctctgt tattttgagt 1320
ataatatttc cacgacactt agtaaagcga agctaaaatg taataataat aaattgtatt 1380
ggagaaacct aaaaaaaaaa ttttttaaaa 1410

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<210> 426

<211> 1422

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (479)

<223> n equals a,t,g, or c

<400> 426

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agaagcatga gcctttctga ctgtctacat gttcttgccc agttttaact tctagtcatg 120
gcgaatgatc gcaggagagc acagactgga ccctgctacg atctctcttg gagtggatca 180
gactgatgat caccaacaac caactcattc ccggataagg aagaagagag tgtcacctac 240
ttcagtgtgg tttcaaccct acttctgcat cttaaagaca ctgtatgggt tcagcagtag 300
tgccctgttt cattagtccc cctgatgntt tcattcctca tctcatcttt ttcttagcag 360
cattcaatga atccttcatt ctagaaacac tctatatctt tgggtttcat grgaccattc 420
tcaccttgtt ttgtcctgtg acttttttga aaaaaacaaa aacaaaaaac ctttttttnc 480
tttttaaatt ctggtaaaaa acacaatgaa aatttgctat cttaaccatg ttgaaatgtg 540
cagttagtaa agtacattca cattgtgggt caagccatca ctaccatcca tctactagaac 600
ccttttcac ttgcagatct gaaactctac ccattaaacr acttcccac ttcccatccc 660
cacagctcct agcaaccaac attctacttt ctctatcagt ttgactactc taggtacctc 720
atatgagtag aatcatacag catttatcct tctctgcctg gcttatttca cttgtataat 780
gtccycaagg ttcatctcat ttgtagcatg catcagaact tcctcccctt ttaaaggctg 840
gataatattt catggtatgt ttagatcaca ttctgtttat ccattcatcc atcagtgaac 900
acttgtgctc cttccaactt tgggctgttg ggtgtcctgc cactgttgct cctagtgtct 960
aatctcgttt attccctcct aatcaagtgt acaacgttgg acactgtgca ggatgatgcc 1020

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acttcatctt ggatgctaatt ctgccatggt gacttctgat taaccccagg cccaggaatg 1080
cctcaagatt tctactttac ttactgttgc ttgtgtaagc caagacaacc ttgatgttat 1140
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cctgtcttgt tgccacatgt ttctaaactt tccaataaat caccttctac tgacaaaaaa 1380
aaaaaaaaaa aaactcgagg tcgacggtat cgataagctt ga 1422

<210> 427

<211> 830

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (686)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (809)

<223> n equals a,t,g, or c

<400> 427

gggatcgacc cacgcgtccg cctagcgccg ctgggcctgc aggtctctgt cgagcagcgg 60
acgccggctt ctgttccgca gatgggggtt gttaaagttg ttaagaataa ggcctacttt 120
aagagatacc aagtgaatt tagaagacga cgagagggtg aaactgatta ttatgctcgg 180
aaacgcttg tgatacaaga taaaaataaa tacaacacac ccaaatacag gatgatagtt 240
cgtgtgacaa acagagatat cttttgtcag attgcttatg cccgtataga ggggatatg 300
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ggcatggaca agatctatga aggccaagtg gaggtgactg gtgatgaata caatgtggaa 480
agcattgatg gtcagccagg tgccctcacc tgctatttg atgcaggcct tgccagaact 540
accactggca ataaagtttt tggcgccctg aarggagctg tggatggagg cttgkctatc 600
cctyacagta ccaaacgatt ccctggktat gawtctgaaa gcaaggaatt taatgcagaa 660
gtacatcgga agcacatyat gggccnagaa tggttgcaga ttacatgcgc tacttaatgg 720
gaagaagatg aagatgctta ccaggaacag gttctyttca atwccttaaa gnacagcgta 780
attccagac catgatggga ggagatgtnt taagaaaagc ttaatgctgg 830

<210> 428

<211> 1622

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (76)

<223> n equals a,t,g, or c

<400> 428

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caaaaataaa actgtngcaa tagtattcta ttaaagcttc ttaaactgct taaacttgcg 120
gttttgacat ggtacctatc ctttcttccc ttttcaaaag attcgctata gagtctttct 180
ctacatgcca gtctccaaaa tggcgcgac ggcatcagaa ggtcagaggt gagtccacgtg 240
ggcccccccg gttccggcgc ggttgaggcc ttcgggtggtg aacgagtctc cagcaccatg 300
tctggtttgt ctggcccacc agcccggcgc ggcccttttc cgttagcggt gctgcttttg 360
ttcctgctcg gccccagatt ggtccttgcc atctccttcc atctgcccac taactctcgc 420
aagtgcctcc gtgaggagat tcacaaggac ctgctagtga ctggcgcgta cgagatctcc 480
gaccagtctg ggggcgctgg cggcctgcgc agcacctcaa gatcacagat tctgctggcc 540
atattctcta ctccaaagag gatgcaacca aggggaaatt tgccctttacc actgaagatt 600
atgacatggt tgaagtgtgt tttgagagca agggaacagg gcggatacct gaccaactcg 660
tgatcctaga catgaagcat ggagtggagg cgaaaaatta cgaagagatt gcaaaagttg 720
agaagctcaa accattagag gtagagctgc gacgcctaga agacctttca gaatctattg 780
ttaatgattt tgcctacatg aagaagagag aagaggagat gcgtgatacc aacgagtcaa 840
caaacactcg ggtcctatac ttcagcatct tttcaatgkt ctgkctcatt ggactagcta 900
cctggcaggt cttctacctg cgacgcttct tcaaggccaa gaaattgatt gagtaatgaa 960
tgaggcatat tctcctccca ccttgtagct cagccagcag aacatcgctg gcacgtgcct 1020
gccctaaggc atcctaccaa cagcaccatc aaggcacgtt ggagctttct tgccagaact 1080
gatctctttt ggtgtgggag gacatggggt accacctaca cccaacaagt caatgaggga 1140
cttcttttta atttggtagg attttgactg gttttgcaac aataggctta ttattagagg 1200
cacctatgac aaaaaatagg ggttacctag ataatgccaa agtcagcatt tgtcctgggt 1260
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atgtttacat agcttctggt gatatctttt catgatttta aatctcttaa aatgggtgatg 1500
gatgtgacac ctcataaaag tgagcttttg actgtagata actcttaaag aaaatgtcat 1560
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aa
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<210> 429

<211> 548

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (48)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (385)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (453)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (512)

<223> n equals a,t,g, or c

<400> 429

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aaggagggtga agagaacaga gaaagagatt tccattttctg ctgccagagc tggatattgc 180
ctgcctgatt ctctgtgttt cctgtttcac cgccaccctt tcaggagaga actacaccag 240
ttcatcatga gggtcaggga agcaaaagct ctcagatgtg tccagggcgt tacttaagaa 300
atgagtatgc agattctgga aggggtgtgg aaaaggatgat cttttacccc caccaggaa 360
aacctgcatt gtgctagcat ggaanaatca tgggctttgg aattaaacct atttggtgga 420
attaaacca tttggtttca aatcccagtt atnacatctg ttaactttgc aaactcacia 480
aaattatttg aaattatctg agttttcatt tntcacctt ccagaatggg gataatgcct 540
cctgcatc 548
```

<210> 430

<211> 569

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (381)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (553)

<223> n equals a,t,g, or c

<400> 430

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ccccgcctt cgccgcttc tgtgggagca agaagcccga gcccgctctg gccacaggca 60
gccgcatgtt cctgcgcttc tactcagata actcgggtcca gcgaaagggc ttccaggcct 120
cccacgccac agagtgcggg ggccagggtac gggcagacgt gaagaccaag gacctttact 180
cccacgcccc gtttggcgac aacaactacc ctgggggtgt ggactgtgag tgggtcattg 240
tggtctgagga aggctacggc gtggagctcg tgttccagac ctttgagggtg gaggaggaga 300
ccgactgcgg ctatgactac atggagctct tcgacggcta cgacagcaca gccccaggc 360
tggggcgcta ctgtggctca nggcctcctg aggaggtgta ctggcgaggga gattctgctg 420
tragtcactc gataaccat accaaaaaag gtttccacct gcgatacacc agcaccaagt 480
tccaggacac acttcacagc aggaaatgac cactggcttr acaagggccg ggactggamc 540
ctgktgcctt tgnccgctaa actggataa 569
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<210> 431

<211> 549

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (541)

<223> n equals a,t,g, or c

<400> 431

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gccggaactt ttgtcgatag gaacggggtt gcacagttga gtgttgctcg ccggcggtgaa 60
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agctgatttg atcgaggagc gcggttaccg gacgggctgg gtctatggtc gctccgcggg 180
ccgtccgcc ggctggtgct tttttatcag ggcaagctgt gttccatggc agggaaacttt 240
tggcagagct ccactatctt gcaatggatt ttggataaac aagatctgtt gaaggagcgc 300
caaaaggatt taaagtttct ctcaaggaa gaattattgga agttacaaat attttttaca 360
aatgttatcc aagcattagg tgaacatctt aaattaagac aacaagttat tgccactgct 420
acggtatatt tcaagagatt ctatgccagg tattctctga aaagtataga tcctgtatta 480
atggctccta catgtgtgtt tttggcatcc aaagtagang gaaaaaaaaat tttttttttt 540
ngggggggg                                     549
```

<210> 432

<211> 1221

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1160)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1183)

<223> n equals a,t,g, or c

<400> 432

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aaaactaaag caccgcagca cttagtgtgct ccggtcgtga agaaaccaca catctattat 180
ggaagtgttg aagagaagga gagggagcgt ctggccaaag gagagtctgg gattttgggg 240
aaagacggac ttaaagcagg gatcgaaagt ggaaatatta atataacctc tggagaagtg 300
tttgaaattg aagagcatat cagcgcgcga caggcagaag tattggctga gtttgagaga 360
aggaagcgag ccgcgcagat caatgtttcc acagatgact cagagggtcaa agcttgccctt 420
agagccttgg gggaacccat cacacttttt ggagaggggtc ctgctgaaag aagagaaagg 480
ttaagaaata tcctctcagt tgtcgggtact gatgccttga aaaagaccaa aaaggatgat 540
gagaagtcta aaaagtccaa agaagagtat cagcaaacct ggtatcatga aggaccaa 600
agcttgaagg tggcaagact atggattgct aattattcgt tgcccagggc aatgaaacgc 660
ttggaagagg ccgactcca taaggagatt cctgagacaa caaggacctc ccagatgcaa 720
gagctgcaca agtctctccg gtctttgaaat aatttttgca gtcagattgg ggatgatcgg 780
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cctatctcct actgtcaact tagtcccaat tccaagatgc tggccacagc ttgttggagt 840
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aacacaaatg taggagcaat tgtattccat cccaaatcca ctgtctcctt ggacccaaaa 960
gatgtcaacc tggcctcttg tgcggctgat ggctctgtga agctttggag tctcgacagg 1020
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tccccaggac ctcaagtaaaa atctggcatt agggccatgc gcatgggctc acaccttaag 1140
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ttgcacactg cactcccage t 1221
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<210> 433

<211> 1115

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (45)

<223> n equals a,t,g, or c

<400> 433

```
ggcacacatc accaagccca gccaaatttt gttttttttt tgtanagatg gggtttcac 60
acgttkccca ggctgatctc gaacctctgg gctcaagcaa ttcactcgcc tcggcctccc 120
aaaatgctgg gattacaggc ctgagccact gcgcccagcc aggatttgaa ttattttaac 180
tcatccatgg gctgccctag aatgtcacia atgaggggtg tttaatgcct ttcttatagc 240
tgctactgga acactattat gacctaattt atgagccatc cttactcatc tacaagtgtc 300
gaagcaatgt tacatacttt ttgctaaac tcagattttt tagcctaatt tcttgctctc 360
ctatccacct gcatccacac atggcctgca tggggctgcc ttccctgcag tggtctgcag 420
ccatgcttca gggatatagc gttggtggac agcctcaggt cttgggggca ctatagccac 480
taaacgaggt gtgaaaggct caagaggatg accagcaatt aattatcccc agaaagtga 540
ggaaaagaga cctttaggga tggtgctggt caagtcttga tttgaccgga gtcaaatcaa 600
tcttcaagca atcttggaat cctcaactgc agtaagcatt tcaaaatgca aacaaactgc 660
ttaacaactg acaagacacc agcccatacg ctgctcttcc aacagtgggt tctagctttg 720
aacaaaagtg ctaaacattt cttgaatat attcttctc tttttgtcct catcactcaa 780
tactggtgct cttgtcacag gtagaacagc ttgtttcttt tccatctatt caagtgtgtt 840
tctaattcta aaatgctgat cttctctgga gtctatggta ggcaattatg gtcactggaa 900
tagtttgtct tgttttmaaa tattattggt gcatgtacaa cagcatccaa catatctgtc 960
ttgttcctag atatatagct ctgatttttag gccttttgtg cataccatta caatatgggt 1020
gggtaagaca ttctacagta gcctgtgctg aactgatctc ttaaataaac ttgcttctgg 1080
ttaactaaaa aaaaaaaaaa agggcggygc ctcta 1115
```

<210> 434

<211> 1604

<212> DNA

<213> Homo sapiens

<400> 434

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ctgtgcttac tctgtttctt tcctcacttt gctttccaag gtggatatgtg atccccagct 60
caggcctgtg cagacaggaa attctcccct gcagcaagta ggggaagtgg gttgtgggat 120
gtgacctcct tccagatata aggcagttag tgtaaacctg ccacctccag ccctgatcca 180
ttctcaccta gcggctacag gaagctgtgt ctgttcgatt tgggtggagg agatgtgcag 240
ggagctgtat cttgtcctcc gcttgtgaaa aactcaagga tgtggagaag agtagaccgt 300
```

ggaaccctgc tcttctgcag ccaagctgag gggcaggatg cgtgtgggac agtggtagag 360
aagcagggga tagactcata ggctgcaaca aaggtagactc tgtccctgga cactgcctcc 420
gtactttctc cttgcttcac tggccacagc atctccctcc agccctcgct atgtgcctct 480
gccatcttca cccatcatgg agcagagggtg aggagaggca gcctgggaat atggagacca 540
gtgaaggacc aggcctggag agcacagggt cctacctggg catccagcag aggagccct 600
aaaggccagg agcaccctaa gaggaggagg ggcagccagc ctccattgac ggcgagcctc 660
cagccctctc ctactttgat caccatttct ctccaggctt tctgcctccg agatgtggca 720
ccatagtgcg gtgcctgtg gcttcaccgc cctacttcca cctccgcca gcctgtaatg 780
tttatataag cagcctcaag gaccaagaac catctgcgaa aggacacaca caggaaattc 840
ataaaagaaa tctgaatgga taaaaccatg aaaaaaagta tgcttcatta gtaattaaag 900
aaaggcaaat agagctggaa gcatttttcc cttagcaaac cataacagaa aaaaataaga 960
cccaatattg gcaaagagac tactgaaaaa acattcccat acattgcgtg tgggagtata 1020
catcgggtgca ggcttcctgg atgacagttg ggtgatatgt gtcagtgtggc ctaaaagcct 1080
ccatgtcatt tgacctacga attctatctt tgggaattta tcctaagaaa atacttaagg 1140
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gtttggttg gaatttatc cttttctgct gtaacgaaag tttgcaatag gggattgctt 1260
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gaacaaagtc actgtaattt tcatctttgg ttttctgtg atttccaaat tttccacatt 1560
ttgtatttca tataataaat ataatttaag aaaaaaaaaa aaaa 1604

<210> 435

<211> 301

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (274)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (277)

<223> n equals a,t,g, or c

<400> 435

gaggcgtga acgagcagct ttctagcgag cgcagcaacc tggcccagggt gatccgcccag 60
gagttcgagg accggctggc agcctctgag gaggagacgc ggcaggccaa ggccgagctg 120
gccacgctgc aggcccgcca gcagctggag ctggaggagg tgcaccggag ggtgaagaca 180
gccctcgcgga ggaaggagga ggccgtgagc agcctccgga cacaacatga ggtgagtcct 240
tgtggccagc cctgctggac ctcggggctg ggancangcc tgaccctgtg ggtgtgctgc 300
a 301

<210> 436

<211> 318

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<400> 436

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aattcggcac gaggaacccc ttagtcctgg ccatttcaaa agcatcacac agaagaagac 60
cttgatattt acattttaagt cacatatgca gctactgaca cttactagtg ctgttatagt 120
cctggctatt attccatgag gtcgtcacat tttaaccttt tgcataagcc tccaacggcc 180
tgatggaatg atgaagcctc agaacagttt ctacacaatg gctaagggat gtacccattt 240
tnaattttcc tcttttctgt gatcacagag ggtgaatacg ctttggccgg atacacagaa 300
gtgaaaactg tcacccat                                     318
```

<210> 437

<211> 1882

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1793)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1795)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1818)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1826)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1844)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1855)

<223> n equals a,t,g, or c

<400> 437

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tagcccgctcg ggagcgccag gccggccagg cctgcgccgy cgccgccgcc gccgtcgccg 60
ccgcgccgac catgtcgmag ccaaggagaa cccgtgcagg aaattccagg ccaacatctt 120
```



```

caacaagagc aagtgtcaga actgcttcaa gccccgcgag tcgcatctgc tcaacgacga 180
ggacctgacg caggcaaaac ccatttatgg cgggtggctg ctccctggctc cagatgggac 240
cgactttgac aaccagtgac accggtctcg gaaatggcag cgacggttct tcatccttta 300
cgagcacggs ctcttgcgct acgccctgga tgagatgccc acgacccttc ctcaaggcac 360
catcaacatg aaccagtgca cagatgtggt ggatggggag ggccgcacgg gccagaagtt 420
ctccctgtgt attctgacgc ctgagaagga gcatttcacg cgggcggaga ccaaggagat 480
cgtcartggg tggctggaga tgctcatggt ctatccccgg accaacaagc agaatcagaa 540
gaagaaacgg aaagtggagc cccccacacc acaggagcct gggcctgcc aagtggctgtt 600
accagcagca gcagcagcag cagcagcagc agcagcatcc ccagtgtga gaaagtcccc 660
accaccaagt ccacactctg gcaggaagaa atgaggacca aggaccagcc agatggcagc 720
agctgagtcc agctcagagt cccagccaga gccagcctcc tgctgccagc ytctgcggga 780
actgggctag agagcaaaga agaggagagc gccatgagta gcgaccgat ggactgtggc 840
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gctgaagaac agcagctgcc cccgcgcgtc tcccctccca gccccagcac ccccaaccac 960
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gagaccaatg cagtggggcc ctcaccatcc agcgacacac gccagggccg cagcgagaag 1080
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gaggacggcc agtggaaaga aacttggttt gtcctcgccg atcaaagcct gagatactac 1320
agggattcag tggctgagga ggcagccgac ttggatggag aaattgactt gtccgcatgt 1380
tacgatgtca cagagtatcc agttcagaga aactatggct tccagataca taaaaggag 1440
ggcgagttta ccctgtcggc catgacatct gggattcggc ggaactggat ccagaccatc 1500
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aacaagagca gctgctcttt ttgagacctg cccgaggcct actgagaagc aagaggcaga 1620
gctgggggag ccggaccctg agcagaagag gagccgcgca cgggagcgga ggcagagggc 1680
cgctccaaga cctttgactg ggctgagttc cgtcccatcc agcaggccct ggctcaggag 1740
cgggtgggag gcggtggggc tgctgacacc cacgagcccc tgcgccctga ggnngasctg 1800
gggaagctgg agcgggancg tgcacngaag cgggaggagc gccncaagcg cttcnggatg 1860
ctcgacgcca cagaacgggc ca 1882

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<210> 438

<211> 2056

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2046)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2053)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2054)

<223> n equals a,t,g, or c

<400> 438

```

gattcagctt aaccctgat cttcttaagt taaagggtact tttgttttat aaaagctcta 60
gataaaactt tcttttctga tcatgaatca agtatctgtg gtttcatgcc cctctctata 120
cctttcaaaag aactcctgaa gcaacttaac tcatcatttc agcctctgag tagaggtaaa 180
acctatgtgt acttctgttt atgatccata ttgatattta tgacatgaac acagaatagt 240
accttacatt tgctaaacag acagttaata tcaaatcctt tcaatattct gggaacccag 300
ggaagttttt aaaaatgtca ttactttcaa aggaacagaa gtagttaacc aaactaaca 360
gcaaaacctg aggtttacct agtgacacca aattatcggg attttaactg aatttaccca 420
ttgactaaga atgaaccaga tttgggtggg gttttgtttc tatgcaaact ggacacaaat 480
tacaacagta aattttttta taagtgttc tcccttctcc atgatgtgac ttccggagat 540
aaaggattca aaagataaag acaaagtacg ctacagagtg ttaaccagaa agtcctggct 600
gtggttgtag aaacactgtt ggaagaaaag agatgactaa gtcaagtgtc tgccttatca 660
aaagagcaaaa aatgcctctg gttttgtgtt tgggagaaaa atatcttggg cgcactgttt 720
tccttgataa aagtcattct ctctactgtg tgaatgaat acttggaatt ctaattgttt 780
tgtgtgccag gggcagtaat gtccctgcct cttctcccaa tcaagggtga ggagtggggc 840
tggggagagg acttaactga cttaagaagt agggaaaaca aaaacctctc tcctcagcct 900
tccacctcca agagaggagg aaaaacagtt gtctgtgtc tgtaattcag tttgcgtgta 960
ttttatgctc atgcaccaac ccatacagag taaatctttt atcaactata tactgggtgt 1020
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tgaaatgtat tgactgtgta ctatatttta aaaacaaaat gaaataattt gagtgtatt 1140
acagaggttg acattgttca gggatgggac aaagccttct tcaatccttt tcatactact 1200
taatgatttt ggtgcaggaa cctgagattt tctgatttat atttcatgat atttcacatt 1260
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tcattgcagc ctgaaatttt aaaaaagttg tgtaatacgc caaccagtca agttgtgttt 1440
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tataaaaagc aagaattctg tttcctaggg aaacattgca actcagggct aaagtcattc 1560
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aatcaatacg cactttcaga tattcttatt tttattctct taagtcttta ttaactttgg 1740
agagagaaat gatgcatctt tttattttaa atgaagtaga tcaacatggg ggaacaaaat 1800
gataaagaac agaaaacatt tcaatatatt actaataact ttttccaata taaatcctaa 1860
aattcctata acatagtatt ttacagtttt atgaagcttt ctattgtgac ttttatggaa 1920
ttaagagatg aagaagatga gatattttag catttatatt tttcaaaatt atatgtatac 1980
ttaaaaataa agtaacttta tgcatttaaa aaaaaaaaaa agggsgggcc gtttttagagg 2040
atccangttt acnncc 2056

```

<210> 439

<211> 721

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (688)

<223> n equals a,t,g, or c

<400> 439

```

ggcggcgcg gtaggtcgga gctcggagct gctgcttctg gttctcttgt ggccgcccgc 60
gctgtccggc tgccctgggg tgccgaacag acaaggcgtg ggccacagca cctcagaagc 120
cgacgcagct cgacgcaggg gccggcagga ggggtgggcga tcgcgtgtcg gagggcgccc 180

```

```

cgcgggcgagg cgggcgggcg ccagaggggg aaagaggcgg gggcgggcgg tcagccgctg 240
gccggggcgg cgggggaatg tcgatgccg acgcgatgcc gctgcccggg gtcggggagg 300
agctgaagca ggccaaggag atcgaggacg ccgagaagta ctccctcatg gccaccgtca 360
ccaaggcgcc caagaagcaa atccagtttg ctgatgacat gcaggagttc accaaattcc 420
ccacccaaac tggccgaaga tctttgtctc gctcgatctc acagtcctcc actgacagct 480
acagttcagc tgcacccctac acagatagct ctgatgatga ggtttctccc cgagagaagc 540
agcaaaccac ctccaagggc agcagcaatt tctgtgtgaa gaacatcaag caggcagaat 600
ttggacgccg ggagattgag attgcagagc aagacatgtc tgctctgatt tcaactcagga 660
aacgtgctca gggggaraag cccttggnrg gtgstaanaat akkgggyttg acacattaca 720
g 721

```

<210> 440

<211> 1041

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1025)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1030)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1039)

<223> n equals a,t,g, or c

<400> 440

```

ctcgtgcgcg gacattgtca gctgcgtttc cgcggtcgcg gttgaggagc tcaagcttgg 60
gaaaatggtg tgcattcctt gtatcgatcat tccagttctg ctctggatct acaaaaaatt 120
cctggagcca tatatatacc ctctggtttc ccccttcggt agtcgtatat ggcctaagaa 180
agcaatacaa gaatccaatg atacaaacaa aggcaaagta aactttaagg gtgcagacat 240
gaatggatta ccaacaaaag gaccaacaga aatctgtgat aaaaagaaag actaaagaaa 300
ttttcctaaa ggaccccatc atttaaaaaa tggacctgat aatatgaagc atcttccttg 360
taattgtctc tgaccttttt atctgagacc ggaattcagg ataggagtct agatatttac 420
ctgatactaa tcaggaaata tatgatatcc gtatttaaaa tgtagttagt tatatttaat 480
gacctcattc ctaagttcct ttttcgttaa tgtagctttc atttctgtta ttgctgtttg 540
aataatatga ttaaatagaa ggtttggtgcc agtagacatt atgttactaa atcagcactt 600
taaaatcttt ggttctctaa ttcatatgaa tttgctgttt gctctaattt ctttgggctc 660
ttctaatttg agtggagtac aattttgttg tgaaacagtc cagtgaact gtgcagggaa 720
atgaaggtag aattttggga ggtaataatg atgtgaaaca taaagattta ataattactg 780
tccaacacag tggagcagct tgtccacaaa tatagtaatt actatttatt gctctaagga 840
agattaaaaa aagatagggg aaagggggaa acttctttga aaaatgaaac atctgttaca 900
ttaatgtcta attataaaat tttaatccct actgcatttc ttctgttcct acaaatgtat 960
taaacattca gtttaactgg taaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1020
aaaancccn ggggggggnc c 1041

```

<210> 441
<211> 1995
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (1957)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1992)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1995)
<223> n equals a,t,g, or c

<400> 441
gcccacgcgt cgcgccacgc gtccgcagca tcaccatgtc tgttcgatac agctcaagca 60
agcactactc ttcctcccgc agtggaggag gaggaggagg aggaggatgt ggaggaggag 120
gaggagtgtc atccctaaga atttctagca gcaaaggctc ccttggtgga ggatttagct 180
cagggggggt cagtgggtggc tcttttagcc gtgggagctc tgggtggggc tgctttgggg 240
gtcatcagg tggttatgga ggattaggag gttttggtgg aggtagcttt cgtggaagct 300
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atcaggggga gcctcgtgac tacagcaaat actacaaaac catcgaatgac cttaaaaatc 660
agattctcaa cctaacaact gataatgccca acatcctgct tcagatcgac aatgccaggc 720
tggcagctga tgacttcagg ctgaagtatg agaatgaggt agctctgccc cagagcgtgg 780
aggctgacat caacggcctg cgtagggtgc tggatgagct gaccctgacc aaggctgacc 840
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aggaaatgaa agaccttcga aatgtgtcca ctggtgatgt gaatgtggaa atgaatgctg 960
ccccgggtgt tgatctgact caacttctga ataacatgag aagccaatat gaacaacttg 1020
ctgaacaaaa ccgcaaagat gctgaagcct ggttcaatga aaagagcaag gaactgacta 1080
cagaaattga taataacatt gaacagatat ccagctataa atctgagatt actgaattga 1140
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tggaagcctc cttggcagaa acagaaggctc gctactgtgt gcagctctca cagattcagg 1260
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gcagttccgg cggcggctac kgaggcgga gctccggcg cggaagctcc ggcgggcggt 1560
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cagttccggc ggcgggcgcg gcggctacgg gggcggcact ccggcgggcg cacagctccg 1680
gcggcgkata cggcggcggc acagctccgg cggcgggatac ggcgggcgga cagctccggc 1740
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gcgagtcttc atctaagga ccaaggctcag cagaaactag ctggggtaat cagaattagt 1860
tttaacttcc tgtgatggtt tttttgcgct ttaactctag agttgtttta aaaaattaaa 1920
aatcttagag cggttccggt gcattgttca caactantct taacaccagc cgtgaaaatg 1980
gctgatcaaa tncan 1995

<210> 442

<211> 1723

<212> DNA

<213> Homo sapiens

<400> 442

agcagcactt ccggtacgaa aaactcgctg ctgcccacac ctggcttgac aggettggtc 60
tctgcaagtg gctctcagcc ccttcttctt tctgcctca ccttccaatt cgtttgccgc 120
cgccgtcccg cagctgctgt ttccggagtt gccccttccc catgttccgg ggcaggagtc 180
cgcaaagcga agatccgccc gccggttccct catcatgtcc gaactgacta aagagctgat 240
ggagctgggtg tggggcacca agagcagccc cggtctctcg gacaccattt tctgccgctg 300
gacgcaagggt tttgtgttta gtgaatcaga gggatctgca ttagaacagt ttgaagggtg 360
cccctgtgct gttattgcac ctgttcaggc atttcttttg aagaagctcc tgttttcttc 420
ggagaagtct tcttggcggg attgttcaga ggaagagcag aaggaactcc tttgtcatac 480
cttgtgtgat attttagaaa gtgcttggtg tgaccactct ggatcatact gcttggttcc 540
atggttaaga ggaaagacaa ctgaggaaac tgctagtatt tctgggagtc ctgcagagtc 600
tagttgccaa gtggaacatt cttctgcctt ggctgtcgaa gagcttggtt ttgagcgatt 660
tcatgcatta attcaaaaaa gatcgttcag aagtttacca gaattaaaag atgctgtctt 720
ggaccagtat tcaatgtggg gaaataaaatt tggagtattg ctttttctgt attctgtatt 780
actgacaaag ggcattgaaa acataaaaaa cgaaattgaa gatgcaagtg aacccttgat 840
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gccatacatt gagttactct ggaccacaga tcgctctcct tcaactaaatt aatttgtcta 1560
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<210> 443

<211> 1899

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (327)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1878)

<223> n equals a,t,g, or c

<400> 443

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tgtattacta gtaatgtccc gctggagagg ccaccgctgt gcagtgtcat gttccagaaa 480
ttactgatga agcagcatgt gttggtggca tgtgcaactg cctgccatga cagccctctg 540
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ttcagaacta cgacttgaat gtgatcgatt acaataaatg tttttctaaa aagccaaaaa 1860
aaaaaaaaaa aaaccccnng gggggcccg taccaatc 1899
```

<210> 444

<211> 430

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (395)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (413)

<223> n equals a,t,g, or c

<400> 444

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agactccatc ccacatactc cttttgaaac tgggtccagtg tacaacatcc agtgaagagt 180
ataggatggc atagacttac caactcaaag aatggaagga ttctagaaac attatagtcc 240
aacctcctca attcatcggt gatacacaaa ggcccactaa gctgtgtggt tcaactcagca 300
tcacgtggct aatatgatat gaagccacac tagcttgtcc tcagctgtgc caagaatgag 360
agctgccttc tccaaacctc aaaccaaccc atggnatcat taacacctct ttnaaatcca 420
tagggcagtg                                     430
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<210> 445

<211> 2153

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (166)

<223> n equals a,t,g, or c

<400> 445

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taggaacttc agaccagatt gttccagagt accaggagga cagtgnacat tagttccttc 180
ttctgctaata ccccaaaacc tcagaaacct cataattctt aacacctggc atttccattt 240
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agctgctgaa ctcggcattg ygcctcctct tctctgttgg gatgagtgc tttattgatt 360
tgagcagcat atgctgtgat tggctgccct gcaaatttgt ttcccttaag gaaccctcac 420
caactatctc tgctggattt gggagtcccg catcttttgt ggagggcaga gtatggacat 480
cttacacccg gtggtcaagt gtgtaataaa cttgagcatt cgaatgggag aaaaagcaaa 540
tcgcacaatg acatattttg agtaataacc gtatttttca cagggtgaca aattgggcca 600
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caaaagattc catctcccaa cgatttcaga actctgagct cagagagact ccagatttta 960
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tttgagaaat ggcacaaaaa caggcagtc tctttaaggg ctatgcctag gcaaactact 1680
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<210> 446

<211> 492

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (305)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (474)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (475)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (489)

<223> n equals a,t,g, or c

<400> 446

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yctacgccat gtgtgaccgg agcaatgcc a gcagatcgt gtcggagatg ctgcgggtacc 180
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cgggncgact acgtgagtra ggagggtgtgg taccgtgtgc tacagatcgt caccaaccgt 360
gatgacgtcc agggctatgc ccgcaagccc gtctcccgtc acctgtgtga gctgctggca 420
cagcagttct gagccctgga ctctgccccg ggggatgtgg ccggcactgg gcannccctt 480
ggacttgang ca          492

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<210> 447

<211> 1539

<212> DNA

<213> Homo sapiens

<220>
<221> misc feature
<222> (1)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (20)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (25)
<223> n equals a,t,g, or c

<400> 447
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aacccttttg accagaaact ttatgtctat aacgatgggt accttctgaa ttatgatctt 180
tctgtcttgc agaagcccca gtaagctggt taggagttag ggtgaaagag aaaatgtttg 240
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tgatttggtg agttctcttg ggaatcatct gcctcttcag gcgcattttg caataaagtc 420
tgtctagggg gggattgtca gaggtctagg ggcactgtgg gcctagttaa gcctactgtg 480
aggaggcttc actagaagcc ttaaattagg aattaaggaa cttaaaactc agtatggcgt 540
ctagggattc tttgtacagg aaatattgcc caatgactag tcctcatcca tgtagacca 600
ctaattcttc catgcctgga agaaacctgg ggacttagtt aggtagatta atatctggag 660
ctcctcgagg gaccaaactt ccaacttttt tttcccctca ctacacctg gaatgatgct 720
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa agggcgggcc 1539

<210> 448
<211> 3983
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (60)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (67)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (227)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1010)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3067)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3255)

<223> n equals a,t,g, or c

<400> 448

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ttgggtttttt ccttagtctt actgacagag ccttgtccaa tcaggaggaa gtaactttct 180
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accccgaccc ggcccggtca ggccccatac tcagtagcca cgatggaggt gatgaacctg 600
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<211> 1177
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (298)
<223> n equals a,t,g, or c

<400> 449
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gagggttattg caagttccct gatatgagta tggtttcgct tgctacattg tgcctattaa 240
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aatctataat gaaaattgca caaaataaca tttcttaaca aatttaatac aattttgtgt 420
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<210> 450
<211> 2428
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (2009)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2037)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2343)
<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2348)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2375)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2387)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2420)

<223> n equals a,t,g, or c

<400> 450

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cgagcctagc ctccccgcgc cctgggcagt gtggccatgg agaatcaggt gttgacgccg 180
catgtctact gggctcagcg acaccgcgag ctatatctgc gcgtggagct gagtgcgta 240
cagaaccctg ccatcagcat cactgaaaac gtgctgcatt tcaaagctca aggacatggt 300
gccaaaggag acaatgtcta tgaatttcac ctggagttct tagacctgt gaaaccagag 360
cctgtttaca aactgacca gaggcagga aacattacag tacagaagaa agtgagtcag 420
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tttacatctg acatcctttg gcctaacaac atctattatt atagtgtctca gcagtgtggg 1860
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<210> 451

<211> 2485

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (222)

<223> n equals a,t,g, or c

<400> 451

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cagctggttc gaaaatttagg ccgaggtaaa tacagtgaag tatttgaagc catcaacatc 180
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gcgtgaaata aagatttttg agaatttgag aggaggtccc aacatcatca cactggcaga 300
cattgtaaaa gaccctgtgt cacgaacccc cgcccttggtt tttgaacacg taaacaacac 360
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aaaaaaaaaa aaaaaaaaaa aaaac 2485
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<210> 452

<211> 963

<212> DNA

<213> Homo sapiens

<400> 452

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ggccgggact ctgaactatg gcggctagtg atacagagcg agatggacta gcccagaaa 180
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cgagatccag aagcagagag aggaagaaat cgagatccag aagcagggaa agaaaacggc 660
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gaagttaaag ccggactcca agtccacctc ccttcagagg cagaaacaca gcaatggatg 840
cacaggaagc tttagctaga agagaaagac cgggggtctc ccttattgtt tgcccaggct 900
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agc 963
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<210> 453

<211> 604

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (517)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (540)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (567)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (593)

<223> n equals a,t,g, or c

<400> 453

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tttatgaatc tcatgtggga atttcttccc atgaaggaaa agtagcttct tataaacatt 240
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caatcatgga gcatgcttac tatgccagct ttggttacca aatcacaagc ttctttgcag 360
cttccagccg ttatggaaca cctgaagagc tacaagaact ggtagacaca gctcattyca 420
tggttatcat agtcctctta gatgtggtac aagcscatgc ttcaaaaaat tccagcagat 480
gggattggaa tatggtttgg atgggggaca gattccnggt taattttcca ttcttgggan 540
cctagaaggg gactccatgg atctttnggg ggatagccag aattgtttgg ccncaatccc 600
cagt 604
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<210> 454

<211> 1917

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1256)

<223> n equals a,t,g, or c

<400> 454

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cttgccagat ccctccctct gtagacaacc accaacctct gtttgctgtt gaattctctc 480
ctcacattac ccagggtctgc tcaagacatg attttggttt tggtttctga gggttctagt 540
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gggcagaagg ttggagggac acttatgagg gtggccgggg gtctgacgct gcacttttga 600
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acattctgga agttttctca ggctttggac acttctgggg atggaggtgt ggagaagtgg 720
ggagttccct ctcttcatag taaataactc tgaaatatgt gaatgtgaat ggcaggagaa 780
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attccaagta tctttgtgtt ttctctttaa tatttaaact tattctctct gtgagtatat 1860
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<210> 455

<211> 1538

<212> DNA

<213> Homo sapiens

<400> 455

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<210> 456

<211> 2189

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (17)

<223> n equals a,t,g, or c

<400> 456

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<210> 457

<211> 1399

<212> DNA

<213> Homo sapiens

<400> 457

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gagacatgtc cctatgacat agcagtgggtg agcctggagg aggacctgga tgatgtcccc 180
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gacaataata cggggggccac ctacccccac ctgaacttca gcattcccat cacggtgctc 480
cagccggccc tgcagcagta cagccagacc caagacctag gtggcctccg tgagctggac 540
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cggagcaagc tctgaggctg tgttaccacc tttggaaaga agagtgcctt ttttctgctg 660
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aaaaaaaaaa aaaaaaaaaa 1399

<210> 458

<211> 709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<400> 458

cacgagcggg cacgagattt aatgtttcca aggttagacg ttcacttttt gagacgnttg 60
agtagctttt cacttaattg actagcatgt atgggtttct ttaccaggt ccacaattca 120
ctacacaggt ccagaaaaaa agctgatctc tgaaaagcac taggagaagg cagctagaga 180
gggagaattc taattaggcc ggggtcctct gtggcttgaa tgactgaata agtttttata 240
gtcttcaatt cagtgacttc cagattcttc ccaaagaaat ttctagrgat caagagtagg 300

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ctcttttcgga agtacttgcc cgtattacac ttttaatttta caaaccaaac aacagcaatt 360
caaccaatca aacaacaaaa acaatccaaa gaaagagact tggacatagg catcaaggaa 420
tcattttcact ttataattta atagaacact ggtgtatcat tcattaattc tgaaagtga 480
aactaaatgt aaaataattt tgtaagggtt gtgaattgtt gcctaggtat tctggtgatg 540
tttacttttag tgattttatc attaatgaaa gcaatgtgtt tttttagaaa acatattatt 600
agggttcata acgttgacat tctgttggtg caatcataat ctctgtttt gttttagtcc 660
tagctctaca gttgaatgaa tccaagctca cctccaggcc ttttgctat 709
```

<210> 459

<211> 1283

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (86)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (145)

<223> n equals a,t,g, or c

<400> 459

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agcagtctgc cgtggccatg tacatgctct ataagaagca gaagcagcag aacgtggccc 60
actgcatgct ggtaagcaac cgcgtntctc tgggtggggga gcacgctggc catgctgcag 120
cgccttcaag gagcagcagt tcgtnatcgc cgggggtctg gtggaggaca gcaacaacca 180
ccacctcatg ctggaggcca gcragtgggc caccatcgag gggtctgggtg agctcctgca 240
gcccttcaag caggtggccg agatgctgtc ggctccagg taccacacca tcagcatggt 300
gaagccgctg ctgcacatgc tccraaacac cacgctcaac atcaaggaga ccgactccaa 360
ggagctcagc atggccaagg aggtcatcgc caaggagctt tccaagacct accaggagac 420
gcccagagatc gacatgtttc tcaacgtggc caccttcctg gacccccgct acaagaggct 480
gcccttcctc tccgccttcg agcggcagca ggtggagaat cgcgtggtgg aagaggccaa 540
gggctgctgg acaagggtcaa agacggcggc taccggccgg ctgaggacaa gatcttcccg 600
gtgcccagag agcctcccgt caagaagctc atgcggacat ccacgccgcc gcccgccagc 660
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gagtggcatg cccaggtggt ggaggagctg agcaacttca agtcccagaa ggtgcttggc 780
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gatccgccgc caacgtggtc agcgccaaga ggaaccggct ggctcccgcg cacgtggaac 960
gagcaggtgt ttctgtatga raacgcccg agtggggcag aggcggaacc cgaggaccag 1020
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attcgagaag tgagagaggg tcg 1283
```

<210> 460

<211> 435

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (431)

<223> n equals a,t,g, or c

<400> 460

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tcgacccacg cgtccgcaag tacaaaaacc ttaagtttca tttgtagggc cacagatcat 60
agaatttcaa atgacatatt acatagtttg taaatgtata tatttggttg actgaaactt 120
aatcataatt tagttcttaa aactatgtgg cttgaagtgg caagtagcaa gtactgattt 180
taccagattc aagttgattt ttaaaagtaa ccattggaga aatcggtata catttgtttg 240
caggattttt acctcctata actccaccag aaaagttttt tctttcccag ctgatgctgg 300
cacccccacg ggaactcttc aaaaagacgc ctcgccagat tgcactgatg gacgttgga 360
acatgggcca gtctgtggam attagtgggc tcagttagcc ttggccggtg aggrggaayc 420
agtgtttggg nattc 435
```

<210> 461

<211> 654

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (138)

<223> n equals a,t,g, or c

<400> 461

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gcgwccgagc cttyggagct cccagcgtcc cctcgggttc aatcctccag gacctgtgtc 60
tgatgcctgc atgtgggtac ctgggctcca tcaggttcta gatcggcctc cgccctccac 120
tttcagggct ccaggccnag cttctcatgt ctgtggggag ggtctccaga gccttggtct 180
gtggctgagc tgtggaactt gaaggcctct ctgcatcttg tcaactcgtg cccctgcacc 240
ttgggtcatg acctgcttta tgtggcaacc ctgtgacagc tgctaagtcc tagaaaacac 300
gtaacaggac gtgaggtgcc ctctgcgcgc tgtgggcgcg tgcggggaga cccgggcccc 360
aggacgtgag gtgccctctg cgccgtgcgc gcgcgtgcgc ggagaccgcg gccacatgcg 420
agcggggccc cgagacattc tgcactcggg aattgcgggg attatcaaatt cccgcttcag 480
tgggaaacgt gagcgaaacc caaggtgagt ggccgcagcc ttctgtcacg tgctctccc 540
catgtcctaa gtragggtct aggtgagct gccgttgccg agagccttgt gtctgtctcg 600
ggtgtctgca ctgtgagtgg ctccgtgctr gcgtccgcac cagccgcttg gggc 654
```

<210> 462

<211> 2245

<212> DNA

<213> Homo sapiens

<400> 462

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aattacccgg tcgacccacg cgtccattgt cccaatgtgc ccggctcagc ctgaggaagc 60
agtcgtctct ccaggagcca ggtcccgatg tggaggccta gcgccgagga acagtgtctg 120
gcacccgcct ggccccccag acccaccctg ccaacatcaa gttgttcctt ctgctccgga 180
gacccctggg gtgcggccct ggccccctcc acccctgctg ggccagagcg ggtgggcagt 240
gtcaaggccc gctgtctccc aggtgcttgc tgggactcgg ggccggtgca cctggctgtc 300
acctgggtgt gctgtgtgta ggggtccttg cgtggccccc atccttcccc caatgcagaa 360
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```

ctccatgggc agggagctgg ggggacatct cacctcccc atggcacaga gccctccaca 420
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aagctcatca ggccaagacc cggacagagc ttcagaggag tgttgagtga cacctgagga 540
tgcggtgca cactcagc caagggccga gtctcacctg cggtaggggtt tcggctctgc 600
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catgggtggt cccacagcat gggaccaggg tggcctgagg gatgcccagt tgtaacaatg 2160
ctgctgtcac tgtctcatta aatatacatc ctttaaaaaa aaaaaaaaaa aaaaaaaaaa 2220
aaaaaaaaaa aaaaaaaaaa aaaaaa 2245

```

<210> 463

<211> 1280

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1016)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1254)

<223> n equals a,t,g, or c

<400> 463

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caggaataatg ctgtccagtg ggggtgtgtac atcaactgtt cagcttcctg ggaaagtagt 180
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taagtctatt cgagctttkg ctaagggtt cttagctgag gaaaagcacc tccacgtttg 420
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cagtgccatc cagtctttac                                     1280
```

<210> 464

<211> 2431

<212> DNA

<213> Homo sapiens

<400> 464

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agctgagcgc ttaagagtga atttgagatt agtcataaat cgccttaaac tattggagaa 180
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ggccatggag atcctggagc tgtactgtga cctgctgctg gctcggtttg gccttatcca 360
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tgccaaaggg accatcagat ttcaatggac tgccaatggg gacttatcag gcctttccca 900
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aaaaaaaaa aaaaaaaaaa aaaaaaaaaa a 2431

<210> 465

<211> 589

<212> DNA

<213> Homo sapiens

<400> 465

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tctactgttg aatgtgctct taaacatgtc tcagattggg tggatgaaac aaataaaggc 120
acaaaaacag aggggtgagac agaagtgaag aaagatgagg ccggagaaaa ctattccaag 180
gatcaagggt gtcggacatt gtgtggtgta atgaggattg gcctggttgc aaaaggcttg 240
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accctgttaa atacagtcaa agataatctt cctattcrga ttcagaaact cacagaagag 360
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cccacgctaa ctttgaagggt gatacttacc tcacctctaa ttagggacga attggagaag 480
aaggatggag aaaatgtttc gatgaaagat cctccggact tattggayag gcagaaatgc 540
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<210> 466

<211> 1107

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (1099)
<223> n equals a,t,g, or c

<400> 466

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ggacaccggc ggagcctccc cgcccccgcg gaagaaaccc cgccagcaac aatagcaaca 120
gcctgaatgt caataacggg gttccccggc gggcgggcgc cgcacacctca gccaccgtcg 180
cagctgcctc cgccaccacc gccgcctcct ctcccttggc caccaccagaa ctgggcagca 240
gcctcaagaa gaagaagcgg ctctcccagt cagatgagga tgtcattagg ctaataggac 300
agcacttgaa tggcttaggg ctcaaccaga ctgttgatct cctcatgcaa gagtcaggat 360
gtcgtttaga acatccttct gctaccaaact tccgaaatca tgtcatggaa ggagactggg 420
ataaggcaga aaatgacctg aatgaactaa agccttttagt gcattctcct catgctattg 480
tggttaagagg cgcacttgaa atctctcaaa cgttgttggg aataattgtg aggatgaagt 540
ttttgctgct gcagcagaag tacctagaat acctggagga tggcaaggtc ctggaggcac 600
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ttagtgggta tctgatgtgt agccatgcag aagacctacg tgcaaaagca gaatgggaag 720
gcaaaggggac agcttcccgga tctaaactat tggataaact tcagacctat ttaccacat 780
cagtgatgct tccccacggc cgtttacaga ctctcctgcg gcaggcgggtg gaactacaaa 840
gggatcggtg cctatatcac aataccaaac ttgataataa tctagattct gtgtctctgc 900
ttatagacca tgtttgtagt aagaggcagt tcccatgktt atacgcagca gatacttacg 960
gaagcattgt tatgaatttt ggttcctgtt aattcctcct aatgaatggc acttaaaactt 1020
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ggaatacaca ccctgcttna aacttgc 1107
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<210> 467
<211> 2197
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature
<222> (846)
<223> n equals a,t,g, or c

<400> 467

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<210> 468

<211> 3611

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3581)

<223> n equals a,t,g, or c

<400> 468

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3611

<211> 520

<212> DNA

<213> Homo sapiens

<400> 469

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caacttcatt cccttacaca cttcagtgac atcagtgctt tgacaggggg aactgttcat 120
cttgatgagg tgaggttgag atatggttgt agtaggatgt gactttcatg ctttcagcaa 180
aatgtatgtg gggccttatta ccatgaggaa cttgggaagg gatgctggct ctcagaacca 240
cagtgccatt ccatcacttc tccatctgtc tccaggatca gaatcctatt aagaagcggg 300
agaagatacc tcagaaaggt cggaagaaaa aaggtcagtg aactgctggg acttaggtga 360
tcaggtgcaa ggtggggagt acaaattgag tctctttgga tttgccattc tgggtctcac 420
caagccctgt agtatctctt ccatactggg caataatctc cttaggtggg cttttatatt 480
ttgctttcct garctggaaa tcagcatcwt tyacaaattg 520
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<210> 470

<211> 879

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (472)

<223> n equals a,t,g, or c

<400> 470

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gaaaaccgg cgccgtcatc gagagctttg tgaatcacgc cccgggggtc ttctcaggga 180
ccttctctgg cagcctacac cccaactgcc aagacagcag cgggcggccg cggcgtgaca 240
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tgctgcaggg ccagagccag atccgcatgt gcaagcccc gggggaccgg cnttcggcag 480
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gcttgggact cgacttcgag gagctccgta tggaagccag aagtcaacct tgacatcaag 720
tcaaagttcg tggtgggctt aggatctctc ggatcggcca aacttcggcc ctcgcaaccg 780
cagccccagg gcggcgccgg aattcgcaga accccggaaa agaaagttga ccagcccttg 840
caaggagagc gggcaattcc cgcagtcaag acaggttgc 879
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<210> 471

<211> 2557

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (461)

<223> n equals a,t,g, or c

<400> 471

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gctccaccac caatgtctca gtctacctgt tcccttcatt ccattccactc tgagtggcaa 120
naaaggcccc tgtgtgagca cacaagaact ctgagcactc acagtgttcc caacatatca 180
ggggctactt gtartgcctt cgcttccctt ttcgggtgtc cttactcaca tagacatgcc 240
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ggacctgatc ctgctgctgc tccatatagt actcagaaat catctgttct acctctttat 420
gaaaatactt ttcaggagct ccaggtaatg agggcggctg naaatttgtt tagaacacaa 480
atgatggatt tagaattggc aatgctgcgt caaaaccatg gtttatcatc atatgactga 540
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gcctaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaa 2557
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<210> 472
<211> 467
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (455)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (466)
<223> n equals a,t,g, or c

<400> 472
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gaagagggga ggaattgggtg cagttgcctg tctcctactt ggagcagatg ctgtctgacc 180
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acagcggctt caggattact gcgccaccca acctgccctt tccacgtag gttttccagt 420
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<210> 473
<211> 1840
<212> DNA
<213> Homo sapiens

<400> 473
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<210> 474

<211> 1258

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (36)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (528)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<400> 474

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cgggcgacgc cgcgccccca tcagagccgc rggcatctgc atctgggacc gacctcctgg 300
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<210> 475

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<222> (4184)

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<222> (4223)

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<222> (691)
<223> n equals a,t,g, or c

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<222> (396)
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<222> (432)
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<221> misc feature

<222> (1127)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (1143)

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<221> misc feature

<222> (1289)

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<220>

<221> misc feature

<222> (1319)

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<210> 478

<211> 1237

<212> DNA

<213> Homo sapiens

<220>

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<222> (1232)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1236)

<223> n equals a,t,g, or c

<400> 478

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<210> 479

<211> 1098

<212> DNA

<213> Homo sapiens

<400> 479

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<210> 480

<211> 684

<212> DNA

<213> Homo sapiens

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<221> misc feature

<222> (5)

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<400> 480

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<210> 481

<211> 2995

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<400> 481

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gctttcgcag gatgtatgta gtgtctcatg actggagttt gctttgtttt atagtatctg 2880
tactccttgt atttttcaag agctattttg taaacagatg atgtatttct ccattgaaaa 2940
cacaataaaa aaaaaacagc aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaa 2995

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<210> 482
<211> 1248
<212> DNA
<213> Homo sapiens

<400> 482

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gcagacttaa tgtcaagaat gaaaaaaaa tagttcatca ggatgtaacc tgagattcac 60
ctctgcatct ttacaaaaag aatgcacgct tgaagaatgt ggaattcctg cttgttaaacc 120
gtatacactg tgggacgaga caccaatgtc ttgggttacat caaaagaagg ctagcaatgt 180
gtgccagaag actcgggagg accagggaag cagtgaatat gatgagagat ttaatgaagg 240
agttccccct tctgagtatg ttcaatatcc atgaaaacct tttagaagcc cttctggaac 300
tacaagcata tgctgatgtt caggcagtct tagcaaagta tgatgatata agcttaccac 360
agtcagcaac aatatgctac acagctgctt tgctcaaagc aagagctgtc tctgacaaat 420
tctctyctga ggctgcatct cggcgggggc tgagcacagc agagatgaat gcagtagagg 480
ccattcatag agctgtggaa ttcaatcctc atgtgccaaa atacctacta gaaatgaaaa 540
gcttaatcct acccccagaa catatyctga agagaggrga cagkgaagca atagcatatg 600
cattctttca tcttgacacac tggaagagag tggaaggggc tttgaatcct ttgcattgta 660
cgtgggaagg cacttttcgg atgatccctt atcccttgga aaaggggcac ctattttatc 720
cttaccacat ctgtacagaa acagcagacc gagagctgct tccatctttc catgaagtct 780
cagtttacc c aaagaaggag cttcccttct ttattctctt tactgctgga ttatgttccct 840
tcacagccat gctggccctc ctgacacatc agttcccggg acttatgggg gtcttcgcaa 900
aagctttcct cagcactttg tttgccccct taaactttgt catggagaaa gtggagagca 960
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tcacctcacc cgccgctgcc accatctcct ctgtgccaac tccttggtgga ccgcaagaaa 1080
gcatgacttt gaaaaagggg agccattccg agattttaaa atgttcatgg actattccat 1140
attaaaagct gttttgtgtg tacaaaattc actgatgttc agttctatct tattttgcct 1200
tcagaaaaga agaaagtcaa aaataaaaact tttgtgtatt acagcaaa 1248
```

<210> 483
<211> 1862
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature

<222> (124)

<223> n equals a,t,g, or c

<400> 483

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gcagcgaccg ctttggtcgg ctgtgtagac tggtgggtag gctgcgtgct agcttcggcg 60
cggatccctg ggcgtccgta cgtcggagtc cttcgtcctc cagggtccct gttctttgcg 120
ccancgggaa ccactatctc tgcactcctg gggttttgtt acatggctgc tttcctcaaa 180
atgagtgtta gtgtcaattt cttcagacct ttcaccagggt ttttggtgcc atttaccctt 240
cataggaaga gaaataactt aacaattttg cagagataca tgtcttccaa aataccagct 300
gttacttatc ctaaaaatga gagtacaccc cttctgaaag agctagagtt ggataagtgg 360
aaaactacca tgaaatctag tgtgcaagaa gaatgtgttt caacaatctc aagcagtaag 420
gatgaagatc ctctagctgc caccagagag ttcatgaga tgtggagatt gcttggcaga 480
gaagtaccag aacacatcac tgaagaagag ctcaaaaccc ttatggaatg tgtttctaac 540
acagcaaaaa aaaaatattt aaaatattta tatacgaagg aaaaagtga aaaaagctagg 600
caataaaaaa aggaaatgaa agcagcagca agggagaag caaaaaatat caagctgcta 660
gaaaccactg aggaagataa acagaaaaac tttctatctt tacgactttg ggataggaat 720
```

atggacatag caatgggctg gaaggggtgcc caggccatgc agtttggaca acctttgggtt 780
tttgacatgg cttacgaaaa ttatatgaaa cgaaaagaat tgcagaatac tgtttcccag 840
cttttagaaa gtgaaggatg gaacagaaga aatgttgatc ctttccatat ttatttctgc 900
aatctaaaaa tagatgggtgc ttggccagag agttagttaa acggtatcaa gaaaaatggg 960
acaaattgct tttaacatca acagaaaagt ctcatgtaga tttatttcca aaggacagta 1020
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atgtaattgg gtcttttgggt gataagagta tgcagccagg cacatcccta gccaaaggcaa 1140
aacggctgaa cctggcaact gaatgccttc cattagataa atatttaciaa tgggaaaattg 1200
gtaacaaaaa tctcacctta gatcaaatga tacgtatttt gttatgtctg aaaaaacaatg 1260
gtaattggca agaggctctg caattcgttc ccaagagaaa acatactggt tttctggaga 1320
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tttctcttct aaaggtagtc tttcccaact gactgtaggg ttgtgtcttt tcccaattaa 1560
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tccaagattg ttgaacagaa taatctttat cccagttaaa tagttgtacc attggtagac 1680
ttttttatgg aggttcctag aggggtggtgc cctgggggtg gcttggaagc tctgcacccc 1740
ttcccccata gctttccccg tgcattctct tgtctgtatg ttttgaata tcttttacag 1800
taaactggta aatgtgtttc cttcaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1860
aa 1862

<210> 484

<211> 1664

<212> DNA

<213> Homo sapiens

<400> 484

tttaattgtgc aggctattca agttcaatag taaaagctca aaaatgaatg ttctactcca 60
tgctgaagga gctgaaastg ccttcttcat attttgcact ttctggtagt tcccctgttt 120
tttctaattc cctaaaattg tgtgggtgga gtggagccct gcagttgggg ggtaacatgg 180
accactgatt ttgccctttg accctgcaca atgacctttg catcagccaa actcattgcc 240
atgacaactc tttgtactgt gtccgtgccca cagatctgtt ggacacattg ttaatagtaa 300
aggggacaag ttggagacgg tcaattttta cattttttgt tgcaattttt tcttcaatgg 360
ttgtaagtag tttttttttt ttttaataat aaaagggttc actagttaat actctagaaa 420
tatctgtgtg ttgcaattca aatgtatgtt gagattgtga aaagcgcttc agtgccacta 480
gcttaccggg acactagact aagcccttga tgacttattg catgatacag taccaggaac 540
aacagggtgg ctaaatatcat gaaaagcagt gtaagctagt gacactaaag ccagtcttgt 600
attactgtat ttttgacaga atggttttga aaactgtgct acagggactg atgtggcaaa 660
tatatctctt tatgcagaag gaagtctttt tttttctttt tttttttttt aagaagtatg 720
gctttttatg catccttcat cgagggcatt gaagtgtcat ggactgataa aagttgatgc 780
aaaacaagaa agaaacaaac aaaaaaaaaa aaccagcaaa atgtttacca aaaaactcaa 840
acaaatgagc agtgcctgtt caatttcaca gtctctgttg agttcagttg taaatatgtt 900
tcaaatgaca ttttcttgga aaaaaaatct ctacaacatt gtagaatgtg aggggtaact 960
acatcccagg cataggtttc tcaaagctgc agtagattat gtcttcatca agctgttaat 1020
ttgtgcttat atcatataga acttttagca tcctgggaag agctgcccc acctcaatga 1080
tatttctctg agaacaactt ttgtaggact gtgtgtttct ttagatacat ttagtacaac 1140
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aaacttttgg cattttgtcc tcatgggcca taaatacaga acctgtatt ttaattaaat 1260
ttttttacaa aaggaggcac atgcacaatc tccatgtaac aaacctttag cagtaggatg 1320
tattatacga cagttactta atttctagag ttcaggcctc tgggatcaac cccagactgg 1380
gccagaatgt tagtgaagggt tttattgtgc ccggttggag gataacgttc tttgggtact 1440


```
ttttgtgggt tgcaaatgaa ctcaattgcc acaagtttta aactgggtgta aatcaagctt 1500
gacttaatgt gattgttact gttatatcca gcctatactg ctagcagctg ctcatactgc 1560
agtcaattac tggaagcgga tatatttcct atgcaaaaaac tgtttaaaca ataaaatgag 1620
ctatgctaca gaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaa 1664
```

<210> 485

<211> 969

<212> DNA

<213> Homo sapiens

<400> 485

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ggggggccgcg ggggtgcggg gcgggggaaag ccgagggcgt ggggtgggcgc tccgggtcag 60
cagagacggc tgtccgcccg ctgggcgccc ctgcggattt ggtaaatggg aggtgacgct 120
ggtgaccgag agccggggcc cgctgccagg agcctgggcg agggccaggc tggctttgct 180
acagctgacc actccgggtca ggagagagag actgagaagg ctatggatcg actagcccg 240
ggaacacaga gcattcctaa tgacagtcct gcccggggtg agggcaccca ttctgaagag 300
gaaggctttg ccatggatga ggaggactct gatggagaac tgaatacctg ggagctgtca 360
gaagggacaa actgtccacc caaggaaacag cctggcgatc tttttaatga ggactgggac 420
tcggagttga aagcagatca agggaatcca tatgatgctg acgacatcca ggagagcatt 480
tctcaagagc ttaaaccettg ggtgtgctgt gcccacaaag gagacatgat ctatgacccc 540
agctggcacc atccgcctcc actgataccc tattattcca agatggtcct tgaaacagga 600
cagtttgacg atgctgaaga ttgagtgtgg agctttctgc cttgtagggtg ggcgggcctc 660
cacgtcaaga tctcttttcc tgtcttgagg gtgaaaagtc atatctgaga aaatgtttgc 720
agtgacccct agtctggggg acacagacca gtgttcctta ttgacagtgt tcaataaggc 780
cccgctcattc tcgccagtct gttgttgttc ttaatgggct cctccttgaa atgtgtgtgt 840
gtttgtgtca agaggagttg tgttctttgt aaataaagggt taaaaagaga aaaaaaaaaa 900
aaaaaaaaat ttttgcccca aaggggggcg gttaaaagat aacggcgggc gggatttgtg 960
agaatatgc 969
```

<210> 486

<211> 2572

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (823)

<223> n equals a,t,g, or c

<400> 486

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tgcaagaagc agcgactgca gcagcagcag cagcagcggc ggtggcagca gcagcagcag 60
cggcggcagc agcagcagca gcggaggcac cgggtggcagc agcagcatca ccagcaacaa 120
caacaamaaa aaatcctcat caaatcctca cctaagcttt cagtgtatcc agatccacat 180
cttcactcaa gccaggagag ggaaagagga aaggggggca ggaaaaaaaa aaaacccaac 240
aacttagcgg aaacttctca gagaatgctc caaaactcag cagtgttctt ggtgctggtg 300
atcagtgtct ctgcaaccca tgaggcggag cagaatgact ctgtgagccc caggaaatcc 360
cgagtggcgg ctcaaaactc agctgaagtg gttcgttgcc tcaacagtgc tctacaggtc 420
ggctgcgggg cttttgcatg cctggaaaac tccacctgtg acacagatgg gatgtatgac 480
atctgtaaat ccttcttgta cagcgctgct aaatttgaca ctcagggaaa agcattcgtc 540
aaagagagct taaaatgcat cgccaacggg gtcacctcca aggtcttcct cgccattcgg 600
aggtgtccca ctttccaaa gattgattgct gaggtgcagg aagagtgtca cagcaagctg 660
```

```

aatgtgtgca gcatcgccaa gcggaaccct gaagccatca ctgaggctgt ccagctgccc 720
aatcacttct ccaacagata ctataacaga cttgtccgaa gcctgctgga atgtgatgaa 780
gacacagtca gcacaatcag agacagcctg atggagraaa ttngggccta acatggccag 840
cctcttccac atcctgcaga cagaccactg tgcccaaaca caccacagag ctgacttcaa 900
caggagacgc accaatgagc cgcagaagct gaaagtcctc ctcaggaacc tccgagggtga 960
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ttattcacia cctcaccaaa ctagtatcat tttaggggtg ttgacacacc arttttgagt 1080
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accaacaaaa tccatgtgac cattctgcct ctctcagga gaaagtaccc tcttttacca 1260
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atgtaactct ccagccattg taatttgaag atgtggatcc ctttagaacg gttgccccag 1380
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aagcagtata taataacttt attgcatata gatttagttt tgtaacttag ctttattttt 1860
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tctcccagcc cacctcaacc cagaggctac tcttgactta gacctatact gaaagatctc 2100
tgtcacatcc aactggraat tccaggaacc aaaaagagca tccctatggg cttggaccac 2160
ttacagtgtg ataaggccta ctatacatta ggaagtggca gttctttact cgtccccttt 2220
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caggaatgag tcaatcagcc tttaggtctt tagtccgggg gacttggggc tgagagagta 2340
taaataaacc tggctgtcca gccttaatat acttctctta cattttcgtc ctgtagcacg 2400
ctgcctgcc aagtagtcct ggcagctgga ccactctctgt aggaagtcta ttaaggctgg 2460
acagcccagg gttattttata ctctcccagc ccactcaac ccagaggcta ctcttgactt 2520
agacctatac tgaaagatct ctgtcacatc caactgaaa ttccaggaa ca 2572

```

<210> 487

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1256)

<223> n equals a,t,g, or c

<400> 487

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tgttttttatt ttatattatt attatagaag gtggtaccat tatcaattat gtgaagggac 60
atgcagacac cccagctttt gaggggtgctg ggggtaggac tgaggcagcc ccactgggaa 120
ccagactgca gcctggccca tggctgtttt cccaaggatc agttcctgga ggggaagggt 180
ctggccctga ctccgctgtg tcccgagcac acgtgctgac cgcagcccgc cgccctgtag 240
ttcttggtctg ggtctggagg tgtctgtgga gcaccctgcc ctcaccacag gagcgtgagc 300
cacttctgca gtccacgctg aacatgggaa acaacctgaa aagcaggcag gcctcccgtg 360
caggagacct ctgctgtgct ggttcccat gaccacctcc tcctgtgaa atattactgc 420

```

```
ttgaatctgg agcagattgc gggtttataa aactgctttt tatctgagaa caaacggggt 480
tggaatttag tgcgtctttt tccccactcc cagagctgct caartcattc caccggcccc 540
ctcggcttgg gacagggttag tgtaactccc gatcccaggg cctagccctg acacagggtgg 600
cttcccgtat cccgggtggg aaacgccctg ccaccagcgg gcttgagctg gcctgtgtcc 660
ctccacygcc tgcaccaccc acctccagag tgcagtgctg ggcaagggca gctcaagagr 720
acaggaccag gcgcttggca agacatcaga cacaccaaac ccaaaggcgt ggaccccagg 780
ccgggcccgt ggtaccagc aggtggcact gcagctcccc gtcctgcag gtccagcgtc 840
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cccaagctgc gccggcctcc agcccacca cagctggttg tgaagtcagg cctccctccc 1140
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acggcccagc ccgcggtgag cgtcgtgttg catgagcctg ggccccgggc ttcccggtgcg 1320
cctctgccgc aggtgcttct gggcacccat cctctgcgtt tcatttgcag tcgactgtac 1380
agaaggcact caccacaata aacctttcct gaaagcagaa aaaaaaaaaa aaaaaaaaaa 1440
aaaaaaaaa a 1451
```

<210> 488

<211> 1200

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (285)

<223> n equals a,t,g, or c

<400> 488

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gaccggccca cgcttcccgc cagtccccta accctgaggc tgccgcgcgg cggtcactgc 60
gccggggtag tgggccccag tgttgcgctc tctggcgtt ccttacactt tgcttcaggc 120
tccagtgcag gggcgtagtg ggatatggcc aactcgggct gcaaggacgt cacgggtcca 180
gatgaggaga gttttctgta ctttgccctac ggcagcaacc tgctgacaga gaggatccac 240
ctccgaaacc cctcggcggc gttcttctgt gtggcccgcg tgcangcaag aaggggttaa 300
aagtggaatg tatgttgtaa tagaagttaa agttgcaact caagaaggaa aagaaataac 360
ctgtcgaagt tatctgatga caaattacga aagtsctccc ccattccccc agtataaaaa 420
gattatttgc atgggtgcaa aagaaaatgg tttgccgctg gagtatcaag agaagttaaa 480
agcaatagaa ccaaatgact atacaggaaa ggtctcagaa gaaattgaag acatcatcaa 540
aaagggggaa acacaaactc tttagaacat aacagaatat atctaagggt attctatgtg 600
ctaataaaaa atatttttta cacttgagaa cagggatctg ggggatctcc acgtttgatc 660
cattttcagc agtgctctga aggagtatct tacttgggtg attccttggt tttagactat 720
aaaaagaaac tgggatagga gttagacaat taaaaggggg tgtatgaggg cctgaaatat 780
gtgacaaatg aatgtgagta ccccttctgt gaacactgaa agctattctc ttgaattgat 840
cttaagtgtc tccttgctct ggtaaaagat agatttgtag ctcaactgat gatggtgctg 900
gtgaattgct ctgctctgtc tgagattttt aaaaatcagc ttaatgagag taatctgcag 960
acaattgata ataacatttt gaaaattgga aagatggtat actgttttta gaggaataaa 1020
cgtatttgtg gtttaaaaaa aagagcaact tcctttgcac tgtataccct tttgtattat 1080
taggatttta tactatgttt atatgttgcc tatttaataa atcgcttaaa gttatatatc 1140
ttgaatatct ttccataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1200
```

<210> 489
<211> 285
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (21)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (242)
<223> n equals a,t,g, or c

<400> 489
tgcctggcac acacgtttct ntccccact tcctttgggg gtgtgcttca ctgcgggctcg 60
ctaacaggat gtctagtgtt cagtgggtgt cacaagattc agtctgcaga gccgacttcc 120
tcagcctcct gaagacactg aacaccgcag tgttttccag tcagcaacgc aacaaaatca 180
gtttaagtga taatgacaat aacaaacaat ccatagcattc cacagcattc actgcttact 240
gnaaaactta ctatgtccca ggcacaagca ctgactttaa tcttg 285

<210> 490
<211> 682
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (57)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (62)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (80)
<223> n equals a,t,g, or c

<400> 490
gggaagggcg ggcaggaggg cagggaagcc gtcacccagg cacaaagcgc ctcccngtga 60
gnggactcca aagggacggn ccgcggtgtg cagcgagctg cgctcagggg accttgcgcc 120
cggcccttct gctgcacaca gccacccag gacctccgc agcgctgaca ggcggggcg 180
gtgcaaagac ggggcggggt ctctgcgcc ggccccctcc cctgactatc aaagcagcgg 240
ccggctgttg gggccacca cgccttccac ctgccccact gcttcttcgc ttctctcttg 300
gaaagtccag tctctcctcg gcttgcaatg gaccccaact gctcctgcgc cgctgggtgc 360
tcctgcacct gcgctggttc ctgcaagtgc aaagagtgc aatgcacctc ctgcaagaag 420
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ggggcgctcag agaagtgcag ctgctgcgac tgatgccagg acaacctttc tcccagatgt 540
aaacagagag acatgtacaa acctggattt tttttttata ccaccttgac ccatttgcta 600
cattcctttt cctgtgaaat atgtgagtga taattaaaca ctttagacct gaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aa 682

<210> 491

<211> 1859

<212> DNA

<213> Homo sapiens

<400> 491

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agcaggaagc tccctttctc acccttttgt tcccttgccg atagaatcag tcactattag 120
aaaaaatgaa agacgctctg tttaaaacaa tgatgacagc agtacttaat atgtatttcg 180
agggtgaactt atatagattg agagaggctg catttggcag actgatgtat aggaagacct 240
atgtgtttct agcttctccc tgcagggaaa atgctttcgt cattatagcc tctttacaca 300
gactggccat tctagtgaac aggtggtaaa cctttgggct gccagaaac attttatctg 360
ktttcactta cctaggaagg ggaaagatta gcgggtcatc caaaatctgt atgtaagcta 420
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<210> 492

<211> 2709

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2160)

<223> n equals a,t,g, or c

<400> 492

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gatgagttca ttgagagtat ttcccttctg ccggaacctg agaagaccct gcacactgaa 180
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2709

<210> 493

<211> 1451

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1307)

<223> n equals a,t,g, or c

<400> 493

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ctgcagaaca agcagagttt gaccatggat ccagttgtca agtcaaaaga gattgaagct 240
aaaattaagg agctgacaag tacttgtagc cctataattt caaagcccaa acccaaagtg 300
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gacaacccag gccccaggc tgctgagcag ggtacagaca cagctgtgct tcggattcag 420
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tgaagatttc ttagtcagtt tttaggggat tttcggggag gggaaatagg taatgtatgg 600
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tcaattcgca c 1451
```

<210> 494

<211> 1268

<212> DNA

<213> Homo sapiens

<400> 494

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gtgaagtcca aggacgctgg tcttctttct ccctttgtag agtgaggatg aagctctgca 180
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tactaatacc caccttgtag tgttgctatg aagattgaga taatcctcag cagtgtcag 480
caccatgagg cccaacacac acagatcaga tgttcaaatt tcagatctta ccatcatcca 540
```

```

acttaaactg tttctccctc ccagttgtca ggaggaagaa gacctagctt tagcacaagc 600
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ggggggggg                                     1268

```

<210> 495

<211> 384

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (382)

<223> n equals a,t,g, or c

<400> 495

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ccctagggtg tgaggaattc ccagttcaca atctcctgag cagtgcgtgg catctacaga 180
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ccccggcccc agtagctggg accccaggca tgcaccatta caaccaacta attttttttn 360
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```

<210> 496

<211> 975

<212> DNA

<213> Homo sapiens

<400> 496

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aacctcatct tcagatactt acaaaaataga tcgcggattc aggtgtggct ctatgagcaa 180
gtgaatatgc ggatagaagg ctgtatcart ggttttgatg agtatatgaa ccttgtatta 240
gatgatgcag aagagattca ttctaaaaca agtcaagaa aacaactggg tcggatcatg 300
ctaaaaggag ataattattac tctgctacaa agtgtctcca actagaaatg atcaatgaag 360
tgagaaattg ttgagaagga tacagtttgt ttttagatgt ctttgtcca atgtgaacat 420

```


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agtaacacca ttcgttgytg gtatttagtt ttctgaaggg tcgcagttgc cttgagcact 600
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tcmctgtgag gtcttkgtga attttatcgc taagatcaga atgtgagaag tatttgagata 900
tagggaaaga atgaagtgcc tttcaagtac attaaaaatc aagttaagag tttacaggaa 960
agagactgag attgg 975

<210> 497

<211> 2075

<212> DNA

<213> Homo sapiens

<400> 497

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2075

<210> 498

<211> 1904

<212> DNA

<213> Homo sapiens

<400> 498

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atthgttttt ttttctcaca acatctggcc tatattgtct gtcaggargc catgggtcca 180
atgtaaagta catagtthctt acatacttht aactgcagct ggtccctgac ctcaccaggt 240
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tthcttgcaa ataagttatt tactgctatt gatattgaa aattthgtctt ttattcagat 1800
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<210> 499

<211> 2871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (267)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 499

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acagggtgtga gccacagagc tcggccaaag aataaaagaa tggctactcc atgggcagag 180
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aatttttttt ttaatttaat gctgtattta atttgtaagt cctgccattg actctaccag 480
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<210> 500

<211> 1624

<212> DNA

<213> Homo sapiens

<400> 500

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aaaa 1624

<210> 501

<211> 848

<212> DNA

<213> Homo sapiens

<400> 501

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<210> 502

<211> 3192

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (3085)

<223> n equals a,t,g, or c

<400> 502

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3192

<210> 503

<211> 683

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (622)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (626)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (648)

<223> n equals a,t,g, or c

<400> 503

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ggggcgagsg gcaagatggc agaagtagag cagaagaaga agcggacctt ccgcaagtgc 180
acctaccgcg gcgtggacct cgaccagctg ctggacatgt cctacgagca gctgatgcag 240
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ctacaacggc aagaccttca accagggtga gatcaagccc gagatgatcg gccactacct 480
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sctgctgcaa ctctactctc tcc 683

<210> 504

<211> 2196

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2104)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2148)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2196)

<223> n equals a,t,g, or c

<400> 504

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<210> 505

<211> 949

<212> DNA

<213> Homo sapiens

<400> 505

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<210> 506

<211> 365

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (359)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (360)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (361)

<223> n equals a,t,g, or c

<400> 506

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<210> 507

<211> 2059

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (18)

<223> n equals a,t,g, or c

<400> 507

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aactcgagac tagttctcc 2059

```

<210> 508

<211> 1337

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (726)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 508

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cctttgtgtg aagttgacct ggtcaagggc gggcactggt ggaaggcgct gattcccagt 180
tctcagaatg aagtggagct gggggagctg cttctgtcac tgaattatct cccaagtgtc 240
ggcagactga atgttgatgt cattcgagcc aagcaacttc ttcagacaga tgtgagccaa 300
ggttcagacc cctttgtgaa aatccagctg gtgcatggac tcaaacttgt gaaaaccaag 360
aagacgtcct tcttaagggg cacaattgat ctttcttaca atgaatcctt cagcttcaaa 420

```

```

gttccccaag aagaactgga aaatgccagc ctagtggtta cagttttcgg ccacaacatg 480
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gagaccaacc actggaggcg catgctcaac acgcaccgca cagccgtgga gcagtggcat 600
agcctgaggt cccgagctga gtgtgaccgc gtgtctcctg cctccctgga ggtgacctga 660
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aatgtntcac atactattac atccacacct gcatacacac tcgcaacatg tntacacacg 780
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gtaaatgtga taactagatt atgggccatt tggagaaacc aaatggcaac caaaactatt 1260
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aacgccctgt gggtatg                                     1337

```

<210> 509

<211> 731

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (33)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (720)

<223> n equals a,t,g, or c

<400> 509

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attctcccca tttccaaacc atgatatgaa tgggcgctga catgtggaga gaatagataa 180
tttgtgtgtt tgcaatgtgt gttttagata aataggattg ggtatttaaa ttagcatttg 240
tgaatttaat agcatthaaga ttaccttcaa atgaaaaaaaa atctcaaaat ttctatttgg 300
tttttgtgca ttttctttta aaatgtaatc atatgatttt agtgtgttag acttgctgag 360
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ccatagggttt tgggtgtaaa gaatgtttac tgccctccat ttaaattctg aaaagggatg 480
gtggatgttt tccctctcct acgttagaaa ccattcttaa aaacttttga aaatatagaa 540
ccattaagcc tgctatatct gagcaaatta atgggtacct tttttttctt atttaaagca 600
caagaggccc ataaatcttg agttacttta aattcttttt tttgatacaa gttttcagag 660
caagagaata aaaatcatgt gttattaaac ccctaaaaaa aaaaaaaaaa acccgggggg 720
cttcttgggg g                                     731

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<210> 510
<211> 944
<212> DNA
<213> Homo sapiens

<400> 510
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ctctgcacac agcgtggact cggaggacat gtacgcagac ytggttagcc ccgtgtcctc 180
agccagctct cgggtccccg cccagccca gaccaggaag gagaaaggaa aatctaagaa 240
agaagacggt gttaaagagg aaaagcggaa aagggattcg tccacacaac caccctaaatc 300
tgcaaacct ccagcagggg ggaagtcctc ccagcagccc tcgacacccc agcaggcacc 360
ccccgggcag cccagcaggg gcacatttgt ggcccacaag gagatcaagt tgacactggt 420
gaataaggcg gctgataaag gaagcaggaa gcgctatgaa ccatcagaca aggacaggca 480
gagccctcct ccagccaagc ggcccaacac atccccagac cgaggttctc gggaccggaa 540
gtcaggtkgg agactgggt ccccgaaagc agagcggcag agaggccaga actccaaagc 600
ccctgcagcc ccggtgaca ggaagcggca gctgtcacc cagtccaaga gctccagcaa 660
ggtcacgagc gtgcccggca aagcctcgga tcccggcgcc gccagcacca aatcagggaa 720
ggccagcacg ctgtctcggc gggaggagct gctgaaacag ctgaaggccg tggaggatgc 780
tattgcacgc aagcgggcca agatccccgg gaaagcatag gccgtgcccc gaccggactg 840
gacgcatttt tatacatagg gtaagcgcag ccattttgga ttttgagtt aatgtcttat 900
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<210> 511
<211> 517
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (449)
<223> n equals a,t,g, or c

<400> 511
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gagtagcgca gggctcgcag ctgtggccgt ggacttaggc aacaggaaat tagaaatattc 180
ttctggaaaag ctggccagat ttgcagatgg ctctgctgta gtacagtcag gtgacactgc 240
agtaatggct acagcggta gtaaaacaaa accttccct tccagttta tgcctttggt 300
ggttgactac agacaaaaag ctgctgcagc aggtagaatt cccacaaact atctgagaag 360
agagrttggt acttctgata aagaaattct aacaagtcga ataataagatc gttcaattag 420
accgctyttt cmagctgggt acttctatna tacacaggtt ctgtgtaatc tgtagcagtt 480
agatggtgta aattgagcct gatgtcctag gaattaa 517

<210> 512
<211> 3651
<212> DNA
<213> Homo sapiens

<220>

<221> misc feature

<222> (1283)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (3650)

<223> n equals a,t,g, or c

<400> 512

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cgaccgcccc cgccgagccg gaggaaggag gttgacatga tgaaagaagc attagaaaaa 120
cttcagctca atatagtaga gatgaaagat gaaaatgcaa ctttagatgg cggagatggt 180
ttattcacag gcagagaatt ttttgtgggc ctttccaaaa ggacaaatca acgagggtgct 240
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cacgtcttgc tgcaccgaac cccggaagag tatccagaaa gtgcaaagggt ttatgagaaa 540
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ccttgacaat ctactgtgcc actgtgctac taactcttgt ttacaaaatt tgattctaag 780
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gatttgctaa atgaattaag caacctagaa gatacagagc yaatgaatta tcaaatgtg 900
attaatccca gtaaggaaac actcatttag tgtctgtatt tttgggtgtg aaattattta 960
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cctagtcatc tccacctttc ctgtattgcc tgtggcttgt tgtttaagat taagaatcaa 2100
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tatttgatta ttttatgtca gaaatttgca aaagtttttt tctcctcctt ctcttccttg 2340
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<210> 513

<211> 1936

<212> DNA

<213> Homo sapiens

<400> 513

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tatgaggagg gcaagatggt ggtccatttt gagcgctgga gtcatcggtta tgatgagtgg 180
atttactggg atagcaatag attgcgaccc cttgaragac cagcactaag aaaagaaggg 240
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acagactgtc gctattaccc tgccaagatt gaagcaatta acaaagaagg aacatttaca 360
gttcagtttt atgatggagt aattcgttgt ttaaaaagaa tgcacattaa agccatgccc 420
gaggatgcta aggggcagga ttggatagct ttagtcaaag cagctgctgc agctgcagcc 480
aagaacaaaa cagggagtaa acctcgaacc agcgctaaca gcaataaaga taaggataaa 540
gatgagagaa agtggtttta agtaccttca aagaaggagg aaacttcaac ttgtatagcc 600
acaccagacg tagagaagaa ggaagatctg cctacatcta gtgaaacatt tggacttcat 660
gtagagaacg ttccaaagat ggtctttcca cagccagaga gcacattatc aaacaagagg 720
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acagctccaa tgctggagca ggcgatttca cctaaacctc aaagtcaaga aaaaaatgaa 900
gctgacatta gcagttctgc caacactcag aaacctgcac tgttatcctc aactttgtct 960
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aaacccctta aatcaccact ttcccagaa ttaatacaag tcgaggattt gacgcttgta 1080
tctcagcttt cttcttcagt gataaataaa actagtctc cacagcctgt gaatccccct 1140

```

```

agacctttca agcatagtga gcggagaaga agatctcagc gtttagccac cttacccatg 1200
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taccgaagg caattctatc cgktgatctt agtggtgaaa gtatgtgtaa ccatgtgatg 1860
gttaaaacaa gacttacaat tcctaaatgt gtaactgaga ataaaacgta ctctgttaag 1920
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<210> 514

<211> 1177

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (24)

<223> n equals a,t,g, or c

<400> 514

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gggtactgtct cggtatcatt ctgctaataca ttgttacaga atggtgactt catttggtgct 120
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gcaacatcct ttaataaggt gagggaagca tgaacctcag acttctggca ctattacata 360
gtaagcacat gaagtagttt gataataaat agcagttcta gtacttcaca tttcaccctg 420
gtgtgcaatg cctttttctg ggggtgggg ggtgaggaa aacctggtag tgaatgtgta 480
gttggggaat aaagaaaagc actaaatcct gccctttttg tgtggtttcc ttttgataca 540
actaggttat tcataatgta tacctagaaa agtgaaattg aaaataccaa aagatgtatc 600
atttttattt gaatccatca tgcagtgtac atttcagata atttcttca gtctccagat 660
aggagtgtat ccaaacatct aattttatgt gcaactgtgta tcttatatga atgttttatt 720
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cttctttata atgctaaatc tatatgagta ccataattttt ataagtcagt ggtctgactg 840
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agtagaatat gtaaaagtgg catggcagca cttatgtctc gtgacagtat tgtgtgtcat 960
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tgctgtgtct ggcacttcat tgtacagact tttataataa aagaacttga aagttctaaa 1140
aaaaaaaaaa aaaaaaaaaa aaaaaaaggg gggggggg                                     1177

```

<210> 515

<211> 932

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (864)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (880)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (911)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (912)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (921)

<223> n equals a,t,g, or c

<400> 515

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ggccggggtg gccagggtt cggcctccgg cgtcgggaaa tggcggcggg gggcaggatg 120
gaggacggtt ccttgatat caccagagt attgaagacg acccacttct ggatgcccag 180
cttctccac accactcatt acaagctcac ttagacccc gattccatcc tcttctaca 240
gtcatcatag tgaatcttct gtggtttatt catctcgtgt ttgttgtttt agcattttta 300
acagggtgtgc tttgttctta tcctaattcca aatgaggaca agtgcccagg aaattacaca 360
aaccattga aagttcagac gggtataatc cttgggaaag ttattttgtg gattctccat 420
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<210> 516

<211> 1159

<212> DNA

<213> Homo sapiens

<400> 516

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<210> 517

<211> 2451

<212> DNA

<213> Homo sapiens

<400> 517

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<210> 518

<211> 989

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (336)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (891)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (910)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (913)

<223> n equals a,t,g, or c

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<221> misc feature

<222> (926)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (947)

<223> n equals a,t,g, or c

<400> 518

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<210> 519

<211> 3315

<212> DNA

<213> Homo sapiens

<400> 519

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<210> 520

<211> 2361

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2121)

<223> n equals a,t,g, or c

<400> 520

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<210> 521

<211> 2521

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2477)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2516)

<223> n equals a,t,g, or c

<400> 521

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<212> DNA
<213> Homo sapiens

<220>
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<222> (1279)
<223> n equals a,t,g, or c

<220>
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<222> (1286)
<223> n equals a,t,g, or c

<400> 522
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<210> 523
<211> 1100
<212> DNA
<213> Homo sapiens

<400> 523
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<210> 524

<211> 1963

<212> DNA

<213> Homo sapiens

<400> 524

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<210> 525

<211> 794

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (782)

<223> n equals a,t,g, or c

<400> 525

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<210> 526

<211> 2599

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (57)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2410)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2461)

<223> n equals a,t,g, or c

<220>

<221> misc feature
<222> (2475)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (2500)
<223> n equals a,t,g, or c

<400> 526

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<210> 527

<211> 1305

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1293)

<223> n equals a,t,g, or c

<400> 527

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<210> 528

<211> 1631

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1628)

<223> n equals a,t,g, or c

<400> 528

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<210> 529

<211> 1944

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (568)

<223> n equals a,t,g, or c

<400> 529

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<210> 530

<211> 1425

<212> DNA

<213> Homo sapiens

<220>

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<222> (1409)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1411)

<223> n equals a,t,g, or c

<400> 530

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```

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<210> 531

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 531

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<210> 532

<211> 1658

<212> DNA

<213> Homo sapiens

<400> 532

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```

ccccgcggcg cgccgcgag gccatgctag ccttgcgcgt ggcgcgcggc tcgtgggggg 180
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<210> 533

<211> 2857

<212> DNA

<213> Homo sapiens

<400> 533

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aaaccgggat cctagagggg cggggcccac ctacgcgcgc aggcgcaacc agggccaggt 240
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<210> 534

<211> 1335

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (35)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1334)

<223> n equals a,t,g, or c

<400> 534

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ttgttctcgt gtgtgatcat gagtgcacia tgaagaagac cctagatgct gcatttttta 180
gctctgaaga ttccttaggt atccctgaag acagctcgtc cagatgatca gcatttagag 240

```



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aaaaaaaaaa aaana 1335

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<210> 535

<211> 2818

<212> DNA

<213> Homo sapiens

<400> 535

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gtttttctga ctggccagtt tgaaatagaa aaaagttgtg agttactttt tcagatggca 180
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<210> 536

<211> 1397

<212> DNA

<213> Homo sapiens

<400> 536

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<210> 537

<211> 1233

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1111)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1137)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1202)

<223> n equals a,t,g, or c

<400> 537

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ggccagcagt tattggagat gtccttcaag tctacagtgg gtctgaaggg agggctatta 240
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atgcccagtg tttacatggg gacattgcac agtcacaaag agaaattaca ctaaaaggct 360
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<210> 538
<211> 1016
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (147)
<223> n equals a,t,g, or c

<400> 538
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gaattatttc tcatgctcat tttcttgCGg cagttatctt agaaagaccc ccaaaggctt 360
tgtgattgta agcactgtca tgatcacaga atgcaagctt ctggtaccat gatcctcaac 420
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<210> 539
<211> 1679
<212> DNA
<213> Homo sapiens

<400> 539
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ggcccggggg accctgctgg ccaaggaggt cgtcagtccg gtcttgtctt ccagacccgg 180
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cacgggacgg agccggaatg accaggtggt cacagacctc aggctgtgga tgcggcagac 600
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ggactacggg cacagtgtgg agcagtatgg tgccctgggc gactgcgcg ctccagcgtc 1560
gactggcaga tccgccaggt gcgggcgcta ctgcaggcac agcaggccta ggtcctccca 1620
cacctgcccc ctaataaagt gggcgcgaga ggaaaaaaa aaaaraaaaa aaaagttct 1679

<210> 540

<211> 1080

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (970)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (978)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1027)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1044)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1067)

<223> n equals a,t,g, or c

<400> 540

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acaacattaa tgagaggacc acctgggtgc agaagatcaa ggcggcgtct gagcagtaca 180
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tctaccaaga cgtgctgtgt ctcacctgt ttgacagaga ccagttttca ccagatgatt 480
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<210> 541

<211> 2259

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2247)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2250)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2253)

<223> n equals a,t,g, or c

<400> 541

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cgggcttata aaaatctgtg ccatcatggt gatattatcc aagactgctc cacttaccoc 180
agtgcgtggg acaagtttct gttgaaactt tagatagcag aattatttgc aatttgtagc 240
atagaaaaga tttttaaatt tttttacaaa aggtttttta acagattagg gtaggtgatg 300
gtttaaatca attaagtggc attggaacc taggggttcc ttttgattaa gagccttttt 360
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agtgcaggct gttgactgcg tatgccaaaa agggacagga ggcattgggat agcagggtctg 480

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gggtcctgtr tcctggagta ttatgtctcc ccaccttctg cagttttctc tgaacatgta 660
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cccatattct tctactgcc ttaactctgg tatacaccaa aaagaaatct ttactttcct 2160
tgttttatca ttataaaaat aaagtatttt gctagtatgg aaaaaacctt tgnatttgac 2220
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<210> 542

<211> 1347

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1290)

<223> n equals a,t,g, or c

<400> 542

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tgcttctcag taccaatatg aagtgggtac agttttcaaa cctacacggt gatgttccaa 180
aggatttgac caaacctgtg gtaacaatct ctgatgaacc agacatatta tataagcgcc 240
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tgagaacact ttacagatgt ttagagttag aacatctaac tggaagcaca gcagatgtct 480
acttggataa tattcagcga aacttacctg aagggggtgc catggaagta acaaagacac 540

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gtggggccaga tgagtatgtt taagtggaga gtgcttccag ctgagatgat ttgagtctgy 720
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gaactttata gagttgccta ccagggttac tgtaatggaa tttatgatct taagaaatta 1260
ctagttgtat tatttatcct atgattcatn cattcaataa gcttttactg cataaacttt 1320
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<210> 543

<211> 1901

<212> DNA

<213> Homo sapiens

<400> 543

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aggggcgtgg ttgctctcca gacctacga aaattagttg aacttactca gaagccagtt 180
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gacagtcaaa catgggaaaa cattcttaag gataggatgg gatctgcact gatgattgaa 420
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cactagctta ttcttccttg ttataaaatg gtttgaactt actgaggaga tattcctatc 1860
attaacaaaa ataaactatt taaataawaa aaaagtcgac g 1901

<210> 544

<211> 842

<212> DNA

<213> Homo sapiens

<400> 544

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aggcggtgac taaggctcag aagaaggacg ggaagaagcg caagcgagc cgcaaggaga 180
gctattcagt gtatgtgtac aaggtgctga agcagggtcca tcccgacacc ggcattctctt 240
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cgcccggtgc cctgctgctt ccgggggagc tggccaagca cgccgtgtcg gagggcacca 420
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aggagaaatg aatgcataaa ataactgata atatgaatct atacatagaa cttaggaagt 540
ctcatctgcc tgaaaatgac tgtgtggatc ccacccaaat ccaactcatc ctggtttgct 600
gcacactggt tcatcaaaag aaggttaccg aggggaagga actaaagggtg tttgcacttc 660
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aa 842

<210> 545

<211> 778

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (652)

<223> n equals a,t,g, or c

<400> 545

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cagcaatgaa tgtggatcac gaggttaacc tcttagtgga ggaaattcat cgtttgggtt 240
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taacatatcc aggagagctg cttctgcaag gtgttcatga tgatgttgac attatattac 420
tgcaagatta atgtggttta catatcttta tgtactgcc a tttttgttt ctggtaaact 480
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tatgtatgat gctataaaat aaatcctatt attttctmag natmtggttg anattctgcg 660
aaagcaacaw gcaaactgaa gaccaactcc tatgagaaat attatgatgt ttatgtaata 720
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<210> 546

<211> 2142

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (32)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (225)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (619)

<223> n equals a,t,g, or c

<400> 546

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aagtcagatc atgaagaact ttcaggctcc tccacaaatc tcgctgacca taacctttct 180
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gttttcatgc ccggcctttg ttctccata aatgtgtcct ttagtttcaa acagatcttt 1560

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aagagaatac tgtaacaaac ttcgtacaga gttcgggtcta ttaattgttt catgttagat 1860
attctatgtg tttacctcaa ttgaaaaaaaa aaagaatgtt tttgctagta tcagatctgc 1920
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aagaaaatgc tgttaccttt aagctttgtc aaatttacat taaaatactt gtatgaggac 2040
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tttttgaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaactc ga 2142
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<210> 547

<211> 1893

<212> DNA

<213> Homo sapiens

<400> 547

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agcatgaatt ggaactgcaa tgaaagtcaa atttacttta aaaagaaatt aatatggctt 180
caccaagaag caaagttaa cttatttcat aattgcctac atttatcatg gtcttgaatg 240
tagcgtgtaa gcttgtgttt cttgggcagt ctttcttgaa attgaagagg tgaaatgggg 300
gtggggagtg ggaggaaagg tgacttcctc tgggtgtttat tataaagctt aaattttata 360
tcatttttaa atgtcttggg cttctactgc cttgaaaaat gacaattgtg aacatgatag 420
ttaaactacc acttttttta accattatta tgcaaaattt agaagaaaag ttattggcat 480
ggttggtgca tatagttaaa ctgagagtaa ttcactctgtg aatctgcttt aattacctgg 540
tgagtaactt agaaaagtgg tgtaaaacttg tacatggaat tttttgaata tgccttaatt 600
tagaaactga aaaatatcyg gttatatcat tctgggtgtg ttcttactga caccaggggt 660
ccgctgcccc atgtgtcctg gtgagaaaat atatgcctgg cacagctttt gtatagaaaa 720
ttcttgagaa gtaactgtcc gctagaagtc tgtccaaatt taaaatgtgt gccatattct 780
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ttaaatgaag ggccagcata tatacttgca agataatttt cagctgcaag gattcagcac 900
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cagtcttatt taaccagggg tcctaaccac taacattgtg actttgcttt gagacctttc 1740
ctctcctggg tactgaggtg ctatgaagcc aactgacaaa gatgcatcac gtgtcttagg 1800
ctgatgccac taccgatttt gtttatttgc aatttgagcc atttaaagac caataaactt 1860
ccttttttaa aaaaaaaaaa aaaaaaaaaa aaa 1893
```

<210> 548

<211> 630

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (61)

<223> n equals a,t,g, or c

<400> 548

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naaccagcca gggggaaaagg ggaggtttcc ggtgtcagct gtctctgggt gtctccataa 120
ccagttctta cttgcctgtg cagactttga ggggaagggt gtgaagactt cggttgtggt 180
ccaccaactg gggacagcca tgcctatgtc ggtggaggaa gggcctgagt gccagggacc 240
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atgcgttcag ccgatgaagg gcaaactgtc ttctacacct gtaccaactg caagttccag 360
gagaaggaag actcttgacc tttttcctgg gcaactctrc agtccctccc tcctttcgga 420
aggtgaagga tactggggtt ttagatgcct tgtccatcct gtctggttgc aatgttttgc 480
tcccagaaga gaatcagatc atcatgtggg gattaccatt gttcctggag tactcctacc 540
cttagttgaa tttccttatt aaagttatat ttttctataa gaaaaaaaaa aaaaaaaaaa 600
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa                                     630
```

<210> 549

<211> 586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (508)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (510)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (514)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (573)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (583)

<223> n equals a,t,g, or c

<400> 549

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ggcacgaagc cgcgtttgta ctgtgtctta ccatgcctga accggcaaaa tccgctccgg 60
cccctaaaaa gggctccaag aaagccgtca ccaaagccca gaagaaagac ggcaagaagc 120
gcaagcgcag ccgcaaagag agctactcca tctacgtgta caaggtgctg aagcagggtcc 180
accccgcacac cggcatctcg tccaaggcca tgggcatcat gaactccttc gtcaacgaca 240
tcttcgagcg catcgsggga gaggttccc gcctggcgca ctacaacaag cgctccacca 300
tcacatcccc cgagatccag acggccgtgc gcctgctgct gcccggcgag ctggccaagc 360
acgccgtgtc cgagggcacc aaggcgggtca ccaagtacac cagctccaag tgagtccctg 420
ccgggacctg gcgctcgctc gctcgagtcg ccggtgctt gactycaaag gctcttttca 480
garccaccca cctaactact agaaaarnan cttngttcac ttaatttccc ctttaatttc 540
tttttccata aaargttaag ttaattttta agnggtgaaa ggntca 586
```

<210> 550

<211> 1586

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1574)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1578)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1585)

<223> n equals a,t,g, or c

<400> 550

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gccatgtcgc agaacggagc gcccgggatg caggaggaga gcctgcaggg ctccctgggtta 180
gaactgcact tcagcaataa tgggaacggg ggcagcgttc cagcctcggg ttctatattat 240
aatggagaca tggaaaaaat actgctggac gcacagcatg agtctggacg gagtagctcc 300
aagagctctc actgtgacag cccacctcgc tcgcagacac cacaagatac caacagagct 360
tctgaaacag ataccatag cattggagag aaaaacagct cacagtctga ggaagatgat 420
attgaaagaa ggaaagaagt tgaaagcatc ttgaagaaaa actcagattg gatatgggat 480
tgggtcaagtc ggccggaaaa tattcccccc aaggagtcc tctttaaaca cccgaagcgc 540
acggccaccc tcagcatgag gaacacgagc gtcatgaaga aagggggcat attctctgca 600
gaattttctga aagttttcct tccatctctg ctgctctctc atttgctggc catcggattg 660
gggatctata ttggaaggcg tctgacaacc tccaccagca ccttttgatg aagaactgga 720
gtctgacttg gttcgttagt ggattacttc tgagcttgca acatagctca ctgaagagct 780
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gatcaataag catgtcagac tgattaatgt ctactgtgaa aatttggtag taaattttca 960
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ggccttatat atcacactat tgtagaaagt attatttaat ttaaattggat gcagggtgtc 1200
tactaaagaa agattatata taactatgct aattgttcat aatcaacaga aaccaagata 1260
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gaattaagtc tccgattatt aggtgatcac cctggatgat cagttttctg ctgaaggcac 1380
ctactcagta tcttttcctc tttatcactc tgcattgggtg aatttaatcc tctcctttgt 1440
gttcaacttt tgtgtgcttt taaaatcagc tttattctaa gcaaactctgt gtctacttta 1500
aaaaactgga aatggaaaaa aaaataaatc tttgccaaat cctaaaaaaaa aaaaaaaaaa 1560
ymgggggggg cccnggancc aattnc 1586

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<210> 551

<211> 2143

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1602)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2086)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2097)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2140)

<223> n equals a,t,g, or c

<400> 551

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aagaaaccac gaattgagga tgaagagtgt gtgcgccttg ataaagagag attggctgcc 120
cgtttgagg gtcacaaaaga agggattgta cagactgaac agattagggtc tttgtctgaa 180
gctatgtcag tggaaaaaat tgctgcaatc aaagccaaaa ttatggctaa gaaaagatct 240
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gctgaggtag atgtgacccg agatattgtc agcagagaga gagtatggag gacacgaaca 360
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gtaaaaagcca gagaagaagg gcgtgcacct gaacagcgac ctgccccaaa tgcagcacct 480
gtggatccca ctttgcgcac caaacagcct atcccagctg cctataacag atacgatcag 540
gaaagattca aaggaaaaga agaaacggaa ggcttcaaaa ttgacactat ggggaacyta 600
ccatggtatg acactgraat ctgtaacgga ggggtgcatct gcccggaaga ctcagactcc 660
tgacagcccag ccagtaccaa gaccagtttc tcaagcwaga cctcccccaa atcagaagaa 720
aggatctcga acaccatta tcataattcc tgcagctacc acctctttaa taacctgct 780
taatgcaaaa gaccttctac aggacctgaa atttgtccca tcagatgaaa agaagaaaca 840

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aggttgtcaa cgagaaaatg aaactctaata acaaagaaga aaagaccaga tgcaaccagg 900
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gtacattctt ctcactgact ttgggtgatt tgaaacctag aatgatgtgt ttctatctgt 1920
aatatctttc catttgaaaa aaatctcaaa acacagatta aaaccacaat aggctgtagt 1980
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<210> 552

<211> 1634

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (14)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1468)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1509)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1519)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1608)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1623)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1629)

<223> n equals a,t,g, or c

<400> 552

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tctggcggct cgtgggggtg ttgggggtccg cagggggagg gaggggagtg tcagagtgtg 180
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ccatctgtgt gtccatcacc gtcgtcctcc tagcagtcac cattggcgtc acagtggttg 1140
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gtnaacaanc cggg 1634
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<210> 553

<211> 278

<212> DNA

<213> Homo sapiens

<400> 553

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ggcacagaag gaactcacca aggcccatra gctggaggtr aggctgcaca ctttcagcat 60
gtttggratg ccccggtctg cccctragga cggcgggcac tgggagatag gagagggtgg 120
cgacagtggc ctgaccatcg agaagtcctg gagggagctg gtgcctgggc acaaggagat 180
gagccaggag ctytgccacc aacaggaggc cctgtggrag ctcctgacca ccgagctgat 240
cttacgtgag aaagcttcaa gatcatgaac tgatcttg 278
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<210> 554

<211> 2658

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2128)

<223> n equals a,t,g, or c

<400> 554

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nggcacgagg agagtcacct ggactcagaa ctagagatat ccaatgaccc agacaaaatt 60
aaacttcagc tttctaagca taaggagttt cagaagactc ttggtggcaa gcagcctgtg 120
tatgatacca caattagaac tggcagagca ctgaaagaaa agactttgct tcccgaagat 180
astcagaaac ttgacaattt cctaggagaa gtcagagaca aatgggatac tgtttgtggc 240
aagtctgtgg agcggcagca caagttggag gaagccctgc tcttttcggg tcagttcatg 300
gatgctttgc aggcattggt tgactggtta tacaagggtg agccacagct ggctgaggac 360
cagcccgtgc acgggggacc ttgacctcgt catgaacctc atggatgcac acaaggtttt 420
ccagaaggaa ctggggaaa cgaacaggaa ccgttcaggc cctgaagcgg tcaggccgag 480
agctgattga gaatagtcga gatgacacca cttgggtaaa aggacagctc caggaaactga 540
gcactcgtct ggacactgtc tgtaaaactct ctgtttccaa acaaagccgg cttgagcagg 600
ccttaaaaca agcggaaagt tttcgagaca cagtccacat gctgttgagg tggctttctg 660
aagcagagca aacgcttcgc tttcggggag cacttcctga tgacacagag gccctgcagt 720
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<210> 555

<211> 1728

<212> DNA

<213> Homo sapiens

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<223> n equals a,t,g, or c

<220>

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<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1641)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1642)

<223> n equals a,t,g, or c

<400> 555

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<210> 556

<211> 3355

<212> DNA

<213> Homo sapiens

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<221> misc feature

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<223> n equals a,t,g, or c

<400> 556

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<210> 557

<211> 1079

<212> DNA

<213> Homo sapiens

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<222> (187)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (641)
<223> n equals a,t,g, or c

<220>
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<222> (1042)
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<220>
<221> misc feature
<222> (1055)
<223> n equals a,t,g, or c

<220>
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<223> n equals a,t,g, or c

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<211> 724
<212> DNA
<213> Homo sapiens

<400> 558

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<210> 559

<211> 3125

<212> DNA

<213> Homo sapiens

<400> 559

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<210> 560

<211> 2645

<212> DNA

<213> Homo sapiens

<400> 560

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<210> 561

<211> 1717

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (427)

<223> n equals a,t,g, or c

<400> 561

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```



```
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```

<210> 562

<211> 2417

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2362)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2386)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2398)

<223> n equals a,t,g, or c

<400> 562

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```

```

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<210> 563

<211> 1544

<212> DNA

<213> Homo sapiens

<400> 563

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gttataaaac cgccacagtc ttcaatccag atttgaagac tcatgccata ggtgacattc 180
taaaatacca ttaaagccac ttaaagtgtt aataagaata tacatgcaca tcagctcaat 240
gtctttgagt attaatTTTA tgtaagcatt ctatttTACA tgaatatagg acaaTcatg 300
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ttgttttgct tttccattgg tggaattgaa ataattagtt tttaattaca taagatgcct 780
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<210> 564

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (179)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (180)

<223> n equals a,t,g, or c

<400> 564

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aaaaaaaaaa aaaaaaaaaa 2299

```

<210> 565

<211> 364

<212> DNA

<213> Homo sapiens

<400> 565

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cagcaagtgc tacttccaag ctcaagcccc ctgtcactat gaggggaaat attttaccct 300
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<210> 566

<211> 2481

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1213)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1214)

<223> n equals a,t,g, or c

<400> 566

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<210> 567

<211> 1364

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1362)

<223> n equals a,t,g, or c

<400> 567

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<210> 568

<211> 1606

<212> DNA

<213> Homo sapiens

<400> 568

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<210> 569

<211> 1385

<212> DNA

<213> Homo sapiens

<400> 569

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aaaaa 1385

<210> 570

<211> 1144

<212> DNA

<213> Homo sapiens

<400> 570

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<210> 571

<211> 2754

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2610)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (2611)

<223> n equals a,t,g, or c

<400> 571

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<210> 572

<211> 2657

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1285)

<223> n equals a,t,g, or c

<400> 572

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<210> 573

<211> 2352

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2096)

<223> n equals a,t,g, or c

<400> 573

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<210> 574

<211> 328

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (9)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 574

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<210> 575

<211> 1678

<212> DNA

<213> Homo sapiens

<400> 575

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<210> 576

<211> 2508

<212> DNA

<213> Homo sapiens

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<222> (2472)

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<223> n equals a,t,g, or c

<400> 576

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<211> 1531

<212> DNA

<213> Homo sapiens

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<210> 578

<211> 1244

<212> DNA

<213> Homo sapiens

<400> 578

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<210> 579
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<222> (22)
<223> n equals a,t,g, or c

<220>
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<211> 4006

<212> DNA

<213> Homo sapiens

<400> 580

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<210> 581

<211> 565

<212> DNA

<213> Homo sapiens

<400> 581

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gctgctgatc attttttctt taaaacttgg atagattcca aaagttacag tacctttgtg 480
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<210> 582

<211> 2528

<212> DNA

<213> Homo sapiens

<400> 582

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<210> 583

<211> 507

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (465)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (485)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (493)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (501)

<223> n equals a,t,g, or c

<400> 583

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tctgtaatca tgagtttggt tggagatatt ctccatagat gatcttctac tgaaatgcct 180
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tcagctacaa aggtaatat gtattaaaat catgtttaag atagctgctt ttatgtgtat 360
tttatattgc atgcttttgt aaaaacatgc tgggtgatga aagattagtt ttagagagaa 420
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ctttnggggg ggnaaaaaaa naaaaaa 507
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<210> 584

<211> 1931

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (8)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (21)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1871)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1907)

<223> n equals a,t,g, or c

<400> 584

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tatgttgacc tttatcattt tctattctga acccctctta gcatttaatg tgaaatctaa 240
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ggaaaattaa gagtaatgtt ccatctggaa actgaacttt tgccttgaa cttgtgttg 600
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1931

<210> 585

<211> 1020

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1006)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1018)

<223> n equals a,t,g, or c

<400> 585

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cagaatctaa gaagaagaaa aaggaaggca agaaacagga gaagatgctg gattaaaaaga 840
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tatgtaccgt aggcctttgta ttcaaaaatt atctatagct aagtacacaa taagcaaaaaa 960
caaaaaaaaaa aaaaaaaaaa ctcgagggggg ggtcccgtac ccaatngccc tctcatgnat 1020

<210> 586

<211> 767

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (617)

<223> n equals a,t,g, or c

<400> 586

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agacagawtt ctttctagac agactcatct tcagagtttt cttagagcaa atgaagcctt 420
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agtgtgckgc atagacacca atgggacagg aagagctcct armctgggtg tgctgagatm 720
aagygtaaag agtgtgcagt ggstcatgcc tgtaattccc tcgtgcc 767
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<210> 587

<211> 847

<212> DNA

<213> Homo sapiens

<400> 587

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<210> 588

<211> 2158

<212> DNA

<213> Homo sapiens

<400> 588

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<210> 589

<211> 2299

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (342)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (772)

<223> n equals a,t,g, or c

<400> 589

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2299

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<210> 590

<211> 2180

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1353)

<223> n equals a,t,g, or c

<400> 590

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tcctggcctc caaactgtac cgcccaggca gcgtggccta tgtctcacgt tccggaggca 600
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<210> 591

<211> 1193

<212> DNA

<213> Homo sapiens

<400> 591

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<210> 592

<211> 2002

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1914)

<223> n equals a,t,g, or c

<400> 592

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caggtttttt gggttttggt tt 2002

<210> 593

<211> 1014

<212> DNA

<213> Homo sapiens

<400> 593

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agttgggaaa tcctagagca accatatctg ttactttcca tcctgggttat atttcttaat 180
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ttaaaatgca tcccgttgtt tttgtggcgt ttcgatcctt ttcttttyta atgtgtccca 960
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<210> 594

<211> 333

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (242)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (292)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (328)

<223> n equals a,t,g, or c

<400> 594

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tcaccttcgc ctctgtgaa gtctccccgc agccctctcc acccagaggt ctccctatac 180
cgagaccac catccttcca tcctgaggac cgccccaacc ctcggagccc cccactcagt 240
angtctgaaa gggcttcatt tggaccgaaa caaccgggtt aaccttaca gnettttaag 300
gcttccttaa ggaacctttc aaccaaancc ttc 333
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<210> 595

<211> 1120
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (29)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (40)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (585)
 <223> n equals a,t,g, or c

<400> 595
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 aaaatgccaa cgacttctac cacctctacg cgtttttagt ttttcatttt ctcgaaggaa 240
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<210> 596
 <211> 532
 <212> DNA
 <213> Homo sapiens

<400> 596
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 ttgagtaatt ccatgccttt tgacaagtgt tctgtacca tgccacgacc accacaatcg 180
 agagagaaca tcttcatcac tccagaagg ctcctttgca gtgagtact cctaggagtt 240
 ccagcggccg gtgacattga tctgttttct gtcactgtag atgagatttg tctgttatat 300

acaatttttta aaaatttaa atgatgtatg gcttcttttg ctttagcataa tgttttttgag 360
cttattcatt tggtgcatat atcaatactt tgcttctttt taccacctgt acttcatttta 420
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<210> 597

<211> 1494

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1483)

<223> n equals a,t,g, or c

<400> 597

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<210> 598

<211> 2188

<212> DNA

<213> Homo sapiens

<400> 598

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atgaggggtat atattcggag ygagcgcggg acscgatgag tggccgcgcg gaaggagctg 180

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gacaactgaa gtttaaatat ccacagggtt ttattttgct tgttgaactc ttagagctat 1980
tgcaaaactc ccaagatcca gatgactgaa tttcagatag cttttttatg attcccaact 2040
cattgaaggt cttattttata taattttttc caagccaagg agaccattgg ccatccagga 2100
aatttcgtac agctgcaagt aaactgatgt tgaacatccw gctwtayttc agctggaagc 2160
atttgttttt gaagttgtac atagtaat 2188

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<210> 599

<211> 1273

<212> DNA

<213> Homo sapiens

<400> 599

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gagtttttta attgagaagt ttaattcaga agtttggttt tgttgccctc gatttaacat 180
tttatatttc ttttgaaaaa tttccaacag agctcaaagt atacttttcc cacagcaatg 240
cacattgctg ctgcaataga agttcatgaa gtactgttac caggactaca gaagttacat 300
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ggcactgctg ttggtacagg tttaaatact agaattggct ttgcagaaaa ggttgctgca 540
aaagtggctg cacttacagg cttgcctttt gtcactgctc cgaataaatt tgaagctctg 600

```

```
gctgctcatg acgctcttggg tgagctcagt ggagccatga acactactgc ctgcagtctg 660
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ttgatcttgc ctgaaaatga accagggaagc agtatcatgc caggcaagggt gaaccctact 780
cagtgtgaag caatgaccat gggtgcagcc caagtcattgg ggaaccatgt tgctgtcact 840
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cacaaaaatg gatcaacctt aaaggaaact gctatcgaaac ttggctatct cacagcagag 1140
cagtttgacg aatgggtaaa acctaaggac atgctgggtc caaagtgatt tacataaatt 1200
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ccgtacccat tgg 1273
```

<210> 600

<211> 1239

<212> DNA

<213> Homo sapiens

<400> 600

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ggcgtgcaaa aactaacatt gaaattttga aacagcagca gaggtagtgg attttatttt 180
tcgttattgt tgggtggtta aaaaattccc ccatgtaat tattgtgaac accttgcttt 240
gtggtcactg taacatttgg ggggtgggac agggaggaaa agtaacaata gtccacatgt 300
ccctggcatc tgttcagagc agtgtgcaga atgtaatgct cttttgtaag aaacgtttta 360
tgatttttaa aataaattta gtgaacctat ttttgggtgt catttttttt ttaagacagt 420
cattttaaaa tgggtggctga atttcccaac ccaccccaa actaaacact aagtttaatt 480
ttcagctcct ctgttggaca tataagtga tctcttgttg gacataggca aaataacttg 540
gcaaacttag ttctgggtgat ttcttgatgg tttggaagtc tattgctggg aagaaattcc 600
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gcccctactt ttcaacaatt ttctatgtta gttgtgaaga actaagggtg ggagcagtag 720
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```

<210> 601

<211> 1286

<212> DNA

<213> Homo sapiens

<400> 601

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gtgcgagcca ctgcgcctgg ctggttttca tgaatcttga tagacatcta taacgttatt 180
attttcagtg gtgtgcagca tttttgcttc atgagtatga cctaggtata gagatctgat 240
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```
aacttgaatt cagaatatta agaaaatgaa gtaactgatt ttctaaaaaa aaaaaaaaaa 300
aaaatttcta cattataact cacagcattg ttccattgca ggttttgcaa tgtttggggg 360
taaagacagt agaaatatta ttcagtaaac aataatgtgt gaacttttaa gatggataat 420
agggcacatg ctgagtgcctg ctatcttgaa atgtgcacag gtacacttac cttttttttt 480
ttttttttta agtttttccc attcaggaaa acaacattgt gatctgtact acaggaacca 540
aatgtcatgc gtcatacatg tgggtataaa gtacataaaa tatacttaac tattcataat 600
gtgggggtggg taatactgtc tgtgaaataa tgtaagaagc ttttcaacta aaaaaaatgc 660
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caacaattct tagagatgct agctagtgtt gaagctaaaa atagctttat ttatgctgaa 780
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gcttttctaa tgttttaacc ttgagtattg cagttgctgc tttgtacaga ggttactgca 1200
ataaaggaag tggattcatt aaactaaaaa aaaaaaaaaa aaaaaaaaaa aaaagtcgac 1260
cggccggtta tttagtagta gtaggc 1286
```

<210> 602

<211> 404

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (399)

<223> n equals a,t,g, or c

<400> 602

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tcgaccacag cgtccgccca cgcgtccgcc cagcgcgccg ggaagcccat acataacagt 60
ggaggtgttt tgtctaacca tcaaaatggt tgagactttt ttttaaacad ttctgagttc 120
gaaggtaata ctgacagatt tcttccctct tccctcccca tcaccacct cagtataaac 180
acattactga tagaggaagt cattagaatc atttttaagt ttcagatata ggagacttca 240
tgcaatttg agataagact aattattggg ggttttcctt ggattttttt ttttaataact 300
gggggctatt ttatcagctt gcctattaaa ggactatggt aagtatagaa tcttaatggt 360
tgccagttag taattctttt tttttttttt ttactgtana caca 404
```

<210> 603

<211> 1168

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1121)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1122)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1133)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1153)

<223> n equals a,t,g, or c

<400> 603

```
ggcgccggcg tgggtgcgt ctccggcggt tgaattgcgc ttccgccatc tttccagcct 60
cagtcggacg ggcgcggaga cgcttctgga aggaacgccg cgatggctgc gcagggagag 120
ccccagggtcc agttcaaaact tgtattgggt ggtgatgggt gtactggaaa aacgaccttc 180
gtgaaacgtc atttgactgg tgaatttgag aagaagtatg tagccacctt ggggtgttgag 240
gttcatcccc tagtgttcca caccaacaga ggacctatta agttcaatgt atgggacaca 300
gccggccagg agaaattcgg tggactgaga gatggctatt atatccaagc ccagtgtgcc 360
atcataatgt ttgatgtaac atcgagagtt acttacaaga atgtgcctaa ctggcataga 420
gatctggtac gagtgtgtga aaacatcccc attgtgttgt gtggcaacaa agtggatatt 480
aaggacagga aagtgaaggc gaaatccatt gtcttccacc gaaagaagaa tcttcagtac 540
tacgacattt ctgccaaaag taactacaac tttgaaaagc ccttcctctg gcttgctagg 600
aagctcattg gagaccctaa cttggaattt gttgccatgc ctgctctcgc cccaccagaa 660
gttgtcatgg acccagcttt ggcagcacag tatgagcacg acttagaggt tgctcagaca 720
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gtctagtttt ataggcagct gtccgtgat gtcagcgggt cagcgtgtgt gccacctcat 840
tattatctag ctaagcggaa catgtgcttc atctgtggga tgctgaagga gatgagtggg 900
cttcggagtg aatgtggcag tttaaaaaat aacttcattg tttggacctg catatttagc 960
tgttttggaa cgcagttgat tccttgagtt tcatatataa gactgctgca gtcacatcac 1020
aatattcagt ggtgaaatct tgtttgttac tgtcattccc attccttttc gtttagaatc 1080
agaataaagt tgtatttcaa atatctaaaa aaaaaaaaaa nngggggggs cgnccattcc 1140
ccaaaggggg gtntaaaaccc gggggggtt 1168
```

<210> 604

<211> 458

<212> DNA

<213> Homo sapiens

<400> 604

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ggcggccgtg gcgcgggtgg cggctgctgt gctggctgtg gggacggagg cgggtgaagtg 60
ccatcttcgg ctaggtcgtc acaggctccg gctcatggca tcaagtggca tccatcataa 120
gatcgttaac tgaagacaat atgcaaaatt ctacatgga tgaatacaga aattctagta 180
atggcagcac aggcaacagt tcagaggtag tggtagaaca tcctactgat ttcagtactg 240
agattatgaa cgttacagaa atggaacagt cacctgatga ctctcccaat gtgaatgcat 300
ctacagaaga aactgaaatg gcaagtgtg tggaccttcc agtgacgtg acagaaacag 360
aagcaatttc cctccagaat atgaaaaatt ttggaaaact gtagaaaata atcctcaggt 420
tttaaaggct gggatatatt gcctcaatat gtagaaca 458
```

<210> 605

<211> 911

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (897)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (904)

<223> n equals a,t,g, or c

<400> 605

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cgacccacgc gtccggaccc acgcgtccgg ggaaaatggc gctggccatg ctggtcttgg 60
tggtttcgcg gtggtctgcg gcccggggag tgcttcgaaa ctactgggag cgactgctac 120
ggaagcttcc gcagagccgg ccgggctttc ccagtcctcc gtggggacca gcattagcag 180
tacagggccc agccatgttt acagagccag caaatgatac cagtggaggt aaagagaatt 240
ccagcctttt ggacagtatc ttttgatggc cagctcccaa aaatagacgc accattgaag 300
ttaaccggtg taggagaaga aatccgcaga agcttattaa agttaagaac aacatagacg 360
ttgtcctga atgtggtcac ctgaaacaga aacatgtcct ttgtgcctac tgctatgaaa 420
aggtgtgcaa ggagactgca gaaatcagac gacagatagg gaagcaagaa gggggccctt 480
ttaaggctcc caccatagag actgtggtgc tgtacacagg agagacaccg tctgaacaag 540
atcagggcaa gaggatcatt gaacgagaca gaaagcgacc atcctgggtc acccagaatt 600
gacaccaaag atgttaaaag gataacttca cagtaaatac tttctcctga aatagaggaa 660
gattctttac gttgttgtgc ttgtttttta atcatcagta tagtttaaca cattctttct 720
aagcagtttt gtgtgggata atttgaagaa tatattatga gtaaactccg aaaattttgt 780
ttatccaaag gctcaatgga ttatgtttct attatataca aggttttaag taaacataaa 840
atttcagaaa caaaaataaa aaatttaaaa ttcatagcaa aaaaaaaaaa aaggggnggc 900
cgcnctaggg g 911
```

<210> 606

<211> 738

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (730)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (737)

<223> n equals a,t,g, or c

<400> 606

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cccacgcgtc cgcccacgcg tccgcgcaga tggcggcggc gcacggcgcc tgagcggggc 60
ggggccatga gcgcgcgccg gcccagttc agcattgatg atgccttcga gctgtccctg 120
gaggacgggg gccctgggac cgagtccagc ggggtcgcgc gctttggggc gctgcacttc 180
gagcgtcggg cccggttcga ggtggctgac gaggacaagc agtcccggct gcgctaccag 240
```

```
aacctggaga acgatgagga tggagcccag gcctctccgg agccggatgg gggagtcggc 300
accagggttag ggccagggat tccagccgaa cttccaccgg ggcttccagt tcttctacct 360
gccctacttc gagaagtgat cgcggcgcag cgtggacccc ttgcgcccac gggggcgccc 420
ctcttgccct gttccgttcc cctcatctca aggggaagagg ccctccagga ccctcgaaac 480
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ccgcccgtcg cctgctctgt gccttaactt attctcgggc cgtgcggctg ctaggttgct 600
gttattttgt gctaataaaa gagtaattaa ttccaaaaaa aaaaaaaaaa aaaaaaaaaa 660
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaagggcgg ccgtttttaa 720
ggatccaagn ttacgtnc 738
```

<210> 607

<211> 1348

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1328)

<223> n equals a,t,g, or c

<400> 607

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gtcagcatga aagccttcag tcccgtgagg tccgttagga aaaacagcct gtcggaccac 180
agcctgggca tctcccgag caaaaccct gtggacgacc cgatgagcct gctatacaac 240
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gtgagcaaga tggaaatcct gcagcacgtc atcgactaca tcttggaacct gcagatcgcc 360
ctggactcgc atcccactat tgtcagcctg catcaccaga gacccgggca gaaccaggcg 420
tccaggacgc cgctgaccac cctcaacacg gatatcagca tctgttcctt gcaggcttct 480
gaattccctt ctgagttaat gtcaaatgac agcaaagcac tgtgtggctg aataagcggg 540
gttcatgatt tcttttatct tttgcacaac aacaacaaca acaaattcac ggaatctttt 600
aagtgtgtaa cttatttttc aaccatttca caaggaggac aagttgaatg gaccttttta 660
aaaagaaaaa aaaaatggaa ggaaaactaa gaatgatcat cttcccaggg tgttctctta 720
cttggaactgt gatattcgtt atttatgaaa aagactttta aatgcccttt ctgcagttgg 780
aagggttttct ttatatacta ttcccacat ggggagcgaa aacgttaaaa tcacaaggaa 840
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taatgatgta cttattcatg ctaaactttt tataaaagtt tagttgtaaa cttaacctt 1140
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ccagtgcctt gatttttatt atgctatgtt ataactgaac ccaaataaat acaagttcaa 1260
atttatgtag actgtataag attataataa aacatgtctg aagtcaaaaa aaaaaaaaaa 1320
aaaaattnct cggccgacaa gggaattc 1348
```

<210> 608

<211> 722

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
 <222> (690)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (703)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (718)
 <223> n equals a,t,g, or c

<400> 608

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ggcttaaatg tgattcttga tactgtttta agtatttagg ttgcaattaa ctttggcaaaa 60
gtcagtcgac ataagccctg tggatatggc cttatgtaca ctgtaatgca gacaggtgct 120
tttcatcatt catgtaacat tctcacacag ttgaggrtat tcatctcctc accaattcca 180
gattgtraat gtacywtctt aaacaactct tgaggtcacc aaacagtagt tatttgactg 240
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tatggaaaac tgattctggg aggaagcaga aatgtcccta gataacagca tgtattgcag 420
atacccaaat gtttattgtt ttctcagccc ttcaattttg cttttctctc tcaaagtcta 480
cagactcaat ttaaattctta ctttgattg ttgaaaaaag tcactaagat gtgaatacag 540
aatagacatt gagaggttat atatgtccaa aactcatctg tccagcagtc accgtcctct 600
tcagagtggg cacgttgggc agrtgggcac aggtgctggg gatgcccctc ckggggcaaaa 660
cgccccattt gtggcacttc cagatactan ttatttactt ttnaagagag agacaggntc 720
ac                                                                                          722

```

<210> 609
 <211> 330
 <212> DNA
 <213> Homo sapiens

<220>
 <221> misc feature
 <222> (315)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (321)
 <223> n equals a,t,g, or c

<220>
 <221> misc feature
 <222> (330)
 <223> n equals a,t,g, or c

<400> 609

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ggcagagtat ttactgact aaatattact atataaacat tttcatatct tgccacttca 60

```

cctaacaata cagcacaagc agcttctcat ggcattaaga attgtttgta catgtaattt 120
tgaatggctg tatgctgttt catcttaaga atataccata attctaattt tcatcatta 180
taatagcact gtgacgaaca tccttcttaa caaaattctt tgtctgcacc tatggttatt 240
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cttagttttc agggnggacc ngttgtctcn 330

<210> 610

<211> 1866

<212> DNA

<213> Homo sapiens

<400> 610

ggcctcccaa agtgttgaga ttacaggtgt gagccaccat gctcgtgag agcagatatt 60
tgaaatgtca ctttgagttc tgagaaaaag taaaaagcca gaagacatac tagatatata 120
aatatattac tgcttaaaaa gatctcctaw aaagaaatgt atcmagtgtg tgaatcaaag 180
tctgaaagaa agatgaagag ccaccagact tctaggtagg ttacatcca tcatgttcct 240
cttgactgcc tttgtttgtc gtttagtttt ttgctccact caagcctgtt agaatcacca 300
tggaatacag ctccagtggg aaggccactg gagaagctga tgtgcacttt gagacccatg 360
aggatgctgt tgcagcgatg ctcaaggatc ggtcccacgt tcatcatagg tatattgaac 420
tgttcctgaa ttcattgtcca aaaggaaaat aagactctag gggctccaga taataaggg 480
gaagcaagaa gcatttcatt tgcacatctt tcttggaactt gggatataca gttccagt 540
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gtttcatagt ggactgttta gaagaagaaa tgaaagatcc agtttgggat tatgaaataa 660
accacaaatt aaaatttttg tttaaactgt ccaggatctg atttaaaaaat atggctcttg 720
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accaaacatt caccaaagca aagaacggtt tcagacctt gaactggtat ggtttggcag 960
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caaaaaatac cacagcttag tgtaaatgac aatttggcgg ttttatgtct ttagaaatgt 1080
tttgcctttc taagccttgt gctaaaggcg tataacgggtg gtgcctatct acttaagggg 1140
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<210> 611

<211> 2176

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature
<222> (2162)
<223> n equals a,t,g, or c

<220>
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<222> (2168)
<223> n equals a,t,g, or c

<220>
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<222> (2169)
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<400> 611
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2176

<210> 612

<211> 3619

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (22)

<223> n equals a,t,g, or c

<400> 612

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<210> 613

<211> 1427

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (297)

<223> n equals a,t,g, or c

<400> 613

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gtctcagcag ccctgggtgt tctcgggaac tctgaggagt aatattttat ttggraagaa 180
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<210> 614

<211> 1433

<212> DNA

<213> Homo sapiens

<400> 614

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gttcgcggga gtccgccgga agactacagg cttggacagg tcgccagtag cttatttcgc 180
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<210> 615

<211> 506

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (10)

<223> n equals a,t,g, or c

<400> 615

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gagaaatgcc ttataagtgc aatgaatgtg ggaratattt tagccatcac tccaatctaa 180
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<210> 616

<211> 2174

<212> DNA

<213> Homo sapiens

<400> 616

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<210> 617

<211> 3147

<212> DNA

<213> Homo sapiens

<400> 617

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<210> 618

<211> 2529

<212> DNA

<213> Homo sapiens

<400> 618

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ttctgggcag ccagagccgc aaagggtggag ccgcgttggc gccctccgcg ggaccagcgc 180
ctcggatgcg ggcggacgcg gggggccgcg gctgcgggag cgcaaacggc gkgccagggg 240
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atataagtaa tcagaacact tagaagactg atagatgtca cacagtggta ttatagaagg 1860
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tttatattac tttcatatga ataaaagtaa tccatgcatt gtaaaaaaaaa aaaaaaaaaa 2520
aaaaaaaaa 2529
```

<210> 619

<211> 551

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (6)

<223> n equals a,t,g, or c

<400> 619

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tcctgttgac tgccctggctg cccctctccc tactcctcgg ttccctggtga agaggctgcg 180
cgctgctgtt tggggagggg gtgtgtggag ccgggtcctg tgtccgcagt ggctgctgtc 240
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gttcgggtgt ctcgtgtgtg aacatcacag ggtttgtgga tgcacttaga tgtttgcaat 360
gagcactgtg gctggcatgc cccagtgttt tggataccaa tgcataggac tccatagtaa 420
tcgaatttac cagaggcgaa cgtcatgsag catagtgatc ccattggggg ttgatacagc 480
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aaagcaaaaa a 551
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<210> 620

<211> 1735

<212> DNA

<213> Homo sapiens

<400> 620

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tcaaaacaaa agcaaaacac agtgaacttc accacggagc tgcacagcgt ggggaactca 180
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tagaagggtt attttgatca gccttttgaa gatgggtgtc gtttccctaa cttatctcac 420
```

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agaat ttttga gtgtt gtatt tggca agttc tgagatt tgc cttct gtctt atgccaaaca 480
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atctatatca gagttatatt ttaattttta ttctaaatga aaaaaaccct ttttacttca 1680
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```

<210> 621

<211> 1026

<212> DNA

<213> Homo sapiens

<400> 621

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gtggcactta gagtcttttg tgccataatg cagcagtatg gaggaggat tttatggaga 180
aatggggata gtcttcatga ccacaaataa ataaaggaaa actaagctgc attgtgggtt 240
ttgaaaaggg tattataact cttacaatt ctttttttca gggacttttc tagctgtatg 300
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attaaccaac ataatttttt ttagatcgag tcagcataaa tttctaagtc agcctctagt 420
cgtggttcat ctctttcacc tgcattttat ttggtgtttg tctgaagaaa ggaaagagga 480
aagcaaatac gaattgtact atttgtacca aatctttggg attcattggc aaataatttc 540
agtgtggtgt attattaaat agaaaaaaaa aattttgttt cctaggttga aggtctaatt 600
gatacgtttg acttatgatg accatttatg cactttcaaa tgaatttgct ttcaaaataa 660
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tacatc 1026
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<210> 622

<211> 670

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (598)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (645)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (649)

<223> n equals a,t,g, or c

<400> 622

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ggcgtcagcg agtgcgcggt ccagtgcggc cggaacctgg cgcaactcct agagcgggtcc 180
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acgaagccta caagcaaagg tctctggcta gcgacatyac tgatgagcag aaaaaggntt 600
cgggaagggt gacctartga tatttcaagt tcccgttgta ctggntcanc gtgccrgcca 660
ttcttgaaag                                     670
```

<210> 623

<211> 2163

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (29)

<223> n equals a,t,g, or c

<400> 623

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tactactacg acggggatgt tggaaattac tattatggac aaggccaccc aatgaagcct 180
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atctatcgcc ctcaaaaagc caatgctgag gagatgacca agtaccacag cgatgactac 300
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agattcaacg ttggtgagga ctgtccagta ttcgatggcc tgtttgagtt ctgtcagttg 420
tctactggtg gttctgtggc aagtgtgtg aaacttaata agcagcagac ggacatcgct 480
gtgaattggg ctgggggcct gcaccatgca aagaagtccg aggcacatctgg cttctgttac 540
```



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gtcatgactg tgccttttca taagtatgga gactacttcc caggaactgg ggacctacgg 720
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<210> 624

<211> 601

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (562)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (600)

<223> n equals a,t,g, or c

<400> 624

ggcgagatct tctctgtggc ggagacagcc aggttggcag ctgacgggac agccggggtc 60

tat t t t t g t t g c g g g t t t t c a g c a a a t c c a g g g c t g g t c t g g a g g c g c g a a a c t t a a g g c 120
a t a c a g a a c g a t g g a g t a t a t g g c a g a a t c c a c c g a c c g c a g c c c t g g a c a c a t c t t g t g 180
c t g t g a g t g t g g t g t t c c g a t a a g t c c a a t c c t g c c a a t a t t t g t g t g c c t g t t t g c g 240
a a g t a a a g t g g a c a t c a g c c a a g g t a t t c c g a a a c a a g t c t c g a t t t c g t t c t g c a a a c a 300
a t g t c a a a g g t a t t t t c a a c c a c c a g g a a c t t g g a t a c a g t g t g c t t t a g a a t c c a g g g a 360
a c t t c t t g c t t t g t g c t t g a a a a a a t c a a a g c c c c t c t g a g t a a g g t a c g g c t t g t a g a 420
t g c a g g c t t t g t t t g g a c t g a g c c t c a t t c t a a g a g a c t t a a a g k t a a a c t g a c t a t t c a 480
g a a a g a g g t g a t g a a t g g t g c t a t c c t t c a a c a a g t g t t t g t g g t g g a t t a t g k t g k c c c 540
c a a a t g g g g g g a g a t g g c a t a n a g a n a a c t a a g g a t t c t g g a a a g g t t g g a t t a a g g g g n 600
g 601

<210> 625

<211> 593

<212> DNA

<213> Homo sapiens

<400> 625

g a t g c a g t t t g c t t g g c a g a g c t a t a a g c g t t a t g c a a t g g g g a a a a c g a a c t c c g t c c 60
a c t a a c a a a a g a t g g c t a c g a g g g t a a c a t g t t c g g a g g c c t c a g c g g g g c a a c a g t c a t 120
t g a c t c c c t c g a t a c c c t c t a c c t c a t g g a g c t g a a g g a g g a g t t c c a g g a g g c c a a g g c 180
c t g g g t g g g a g a g a g c t t c c a c t g a a c g t g a g c g g a g a a g c a t c c t t g t t g a g g t g a a 240
c a t c c g c t a c a t c g g g g g a c t c c t c t c a g c c t t c t a c c t g a c a g g a g a a g a g g t g t t c c g 300
a a t a a a g g c c a t c a g g c t g g g a g a g a g c t c c t g c c g g c g t t c a a c a c c c c a c g g g a a t 360
c c c a a g g g c g t g g t g a g c t t c a a a a g t g g g a a c t g g g g c t g g g c c a c a g c c g g c a g c a g 420
c a g c a t c t t g g c g g a g t t t g g a t c c c t g c a c t t g g a a t t c t t a c a c c t c a c t g a a c t c t c 480
t g g c a a c c a g g t c t t c g c t g a a a a g g t c a g g a a c a t c c g c a a g g t c c t c a g g a a g w t c g a 540
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<210> 626

<211> 2272

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (2267)

<223> n equals a,t,g, or c

<400> 626

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g g a c t c g c g t c g c g g c g c g g a g a c g t g a a g c t c t c g a g g c t c c t c c c g c t g c g g g t c g g 120
c g c t c g c c c t c g c t c t c c t c g c c t c c g c c c g g c c c c g c g c c c c c a t g g a g a 180
a g a c t g a g c t g a t c c a g a a g g c a a g c t g g c g a g c a g g c c g a g c g c t a c g a c g a c a t g g 240
c c a c c t g c a t g a a g g c a g t g a c c g a g c a g g g c g c c g a g c t g t c c a a c a g a g a g c g c a a c c 300
t g c t c t c c g t g g c c t a c a a g a a c g t g g t c g g g g c c g c a g t c c g c c t g g a g g g t c a t c t c 360
t a g c a t c g a g c a g a a g a c c g a c a c c t c c g a c a a g a a g t t g c a g c t g a t t a a g g a c t a t c g 420
g g a g a a a g t g g a g t c c g a g c t g a g a t c c a t c t g c a c c a c g t g c t g g a a t t g t t g g a t a a 480
a t a t t t a a t a g c c a a t g c a a c t a a t c c a g a g a t a a g g t c t t c t a t c t g a a a t g a a g g g 540
t g a t t a c t t c c g g t a c c t t g c t g a a g t t g c g t g t g g t g a t g a t c g a a a a c a a a c g a t a g a 600
t a a t t c c c a a g g a g c t t a c c a a g a g g c a t t t g a t a t a a g c a a g a a a g a g a t g c a a c c c a c 660
a c a c c c a a t c c g c c t g g g g c t t g c t c t t a a c t t t t c t g t a t t t a c t a t g a g a t t c t t a a 720

taaccagag cttgcctgca cgctggctaa aacggctttt gatgaggcca ttgctgaact 780
tgatacactg aatgaagact catacaaaaga cagcaccctc atcatgcagt tgcttagaga 840
caacctaaca ctttggacat cagacagtgc aggagaagaa tgtgatgcgg cagaaggggc 900
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aagtaatctg aaccagttct gcaagtgcact gtgttttgta ttactgtgaa aataagaaaa 1260
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atttactact ttctaaagtt tattgatact tcccttttat gtaaaatgta gtagtgatac 2040
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attggactgc atttcttaga gtgttttact atagatcagt ctcattgggc atctcttcc 2160
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<210> 627

<211> 871

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (12)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (863)

<223> n equals a,t,g, or c

<400> 627

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gatggcggct ccgggcgggc gtggccagtg actagaaggc gaggcgccgc gggaccatgg 120
cggcgccggc ggacgagcgg agtcagagg acggagaaga cgaggagag gaggagcagt 180
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aatgcaagggt tttgggcatt gacactgaga ggcccattct gcaagtggac agctgrgtct 300
ttgctgggga gtatgaagac actctaggga cctgtgttat atttgaagaa aatgttgaac 360
atgctgatac agaaggcaat aataaaacag tgctaaaata taaatgccat acaatgaaga 420
agctcagcat gacaagaact ctctgacag agaagaagga aggagaagaa aacatagggtg 480

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aattggaaga ggaagagatt caaatgaacg acagttcaaa cctgagttgt gaacaggaga 660
aaccaatgca cttggaaata gaagattctg gtcctcttat tgatatacct tctgagacag 720
aaggttctgt ttttatggaa actcaaatgc tgccttagaa atcaactcta gatgaaatgt 780
ttctcataat aacttgtaaa gaacttttta gagttgttac ataaaaataa ttgctgtgta 840
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa t 871
```

<210> 628

<211> 779

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (23)

<223> n equals a,t,g, or c

<400> 628

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tggtgagtg tggggacgcc ggccctgcagg cgccatggtc ttcctcaccg cgcagctctg 120
gctgcggaat cgcgtcaccg accgctactt tcggatccag gaggtgctga agcacgccag 180
gcacttccgg ggaaggaaaa atcgctgcta caggttggcg gtcagaaccg tgattcgagc 240
ctttgtgaaa tgcaccaaag cccgatacct gaagaaaaag aacatgagga ccctctggat 300
taatcgaatt acagctgcta gccaggaaca tggactgaag tatccagcgc tcattgggaa 360
tttagttaag tgccagggtg agctcaacag gaaagtccta gcggatctgg ccatctacga 420
gccaaagact ttcaaactct tggtgcctt ggccagtagg aggcgacacg aaggatttgc 480
tgctgccttg ggggatggga aggaacctga aggcattttt tccagagtgg tgcagtacca 540
ctgaggactg ttgctgtatt gattaggaaa agagacagag taatttgtag tttgtttgat 600
ttatactttt gtttatctac aacccaataa cagacatgag ggatggccct gtctctctgg 660
gacagagcct cacagatgat gtccatgttt tgtgtgaatg aaactcaaac actcttcaaa 720
aaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 779
```

<210> 629

<211> 1835

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1835)

<223> n equals a,t,g, or c

<400> 629

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gtcgccatgg ctgagctgca gcagctccgg gtgcaggagg cgggtggagtc catggtgaag 120
agtctggaag gagagaacat ccggaagatg caggggtctca tgttccgggtg cagcgccagc 180
tggtgtgagg acagccaggc ctccatgaag caggtgcacc agtgcacga gcgctgccat 240
gtgcctctgg ctcaagccca ggctttgggt accagtgagc tggagaagtt ccaggaccgc 300
ctggcccggt gcaccatgca ttgcaaygac aaagccaaag attcaataga tgctgggagt 360
aaggagcttc aggtgaagca gcagctggac agttgtgtga ccaagtgtgt ggatgaccac 420
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atgcacctca tcccaactat gaccaagaag atgaaggagg ctctcttatac aattggaaaa 480
taaaagtatt tgccagtggc catcagggct gagggcaaga atatatTTTT tataaggaat 540
tggaattttt agtcttttaa gcaaagttta cgaatgaaga aatgaaggat ggccacaagc 600
gtaaggcata tgtcacttgc ctctggacac tggttatttt atgtttcagt ccctaaaaaa 660
tgaaatggaa aaaagtgggtg ctaaatcgag tcagagatat tacaggagag ttttagagct 720
tattatttcc tgtggccagt gcttgtcctg gcagtaaggc tytccctgt aacaagccag 780
agccctccaa ggtaccagac tcttcttact acacaggtag taacaggctg gcaggtaga 840
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caacaggaaa ttcaaggagg aaaaagtaag caactgggc taggatgagc tgactccctt 1560
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tggcagtgtt cctgccccag catggcacct tattgttttg atagcaactt cgttgaattt 1680
tcaccaactt attacttgaa attataatat agcctgtccg tttgctgttt ccaggctgtg 1740
atatattttc ctagtgggtt gactttaaaa ataaataagg ttttaatttt tccccaaaa 1800
aaaaaaaaa aaaaaaaaaa aaaaataaaa aaatn 1835
```

<210> 630

<211> 1097

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 630

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gagctaagat gactaatttg atgattttcg atctcttttc ccctgtcctg attttaaaag 120
ccccctcctt tttttttttt tttttttttt ctttttttag gcatatgtag taatattaga 180
aacatttaat ttgggaaact ttgattcttg aaagagaaaa caaaagcatg tgaataaact 240
ttgaagtgtt cacctcagtt tgggaccaa ctgcttggat ctttgtaaaa accggttttg 300
tatgtcaagg aggagttaa ggcccttccg accaccttgt gttccccttt tctgcgcasc 360
atgtatcacg tggagtgtct ccttaccaca cctcacgtgc ccctgagccc tatttcctga 420
tttcttcttg gctggacttc cccgttctcc accagcagct ccagtatccc aaactttcta 480
gtcctgtgta tcctcccagc aacgggggtg aaactggagg gcagtgtctg gtctgttttc 540
taagaaactt atgaattcta ttatctttac aaatatgaga aaattttttc aatatTTTT 600
attaatcttt ttataaaatg aaaagaaact cctatgatcg attaagggaag gtgggttatgg 660
ctgggtgtgt caggggtttt tttgggtttt tttttttttt ctttgtcttt ttaaccttaa 720
gctgtttaag ttgaagcatt ctcagatgtt tggggggaaa catcctctta aaatgggtcc 780
ttgtgcttgc cttctgggga ggcggtcctg agcagggtgaa tcataaggca tttatgcata 840
tgttatatgc ggactgcacc cacctctccc cccagcctt tgccctcttg gttgttgtgc 900
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tgctttcccc ttactttgct acattttctat agttaagttg gttttacttg aatgattcat 960
gttttaggggg aaaatgaaaa tctcccttaa aatttgtttc aactcctcct gcaaataaaa 1020
taaatagaagt ggcagatgta aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa 1080
aaaaaaaaaa aaaaaaa 1097

<210> 631

<211> 1537

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (5)

<223> n equals a,t,g, or c

<400> 631

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ggccgggggtg gtcggttttc ctggggctat gtaactgagc tcgtcgactt aggggtcctt 120
cttcgctgcc ctgcgcggt gctagcaggg agtttccgct cgggagagag actgtcctca 180
cgcccgctgc gcctcctcga cggcagagca ggcttgctcg cccgtgggag cgtcccggcc 240
gagaagccct gaggggggag gggaggccat tttgtcccga ccgactcccc ggaaccgggc 300
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cactgtcggg gcttcctcaa agctgttcgt aggtcgcccg cgccgtctcg agcctttttc 420
ccacgcttcc ccggtcctcc ggcctgagaa cgcgcgagtg aggagtggc cgtagtgaga 480
gggaccgatc ccttggggcc gccggcgcg agagcccag ccgctcctcc caatggcgaa 540
gaagacgtac gacctgcttt tcaagctgct cctgatcggg gattccggag tggggaagac 600
ctgctcctt tttcgttttt cggatgatgc cttcaatact acctttattt ccaccatagg 660
aatagacttc aagatcaaaa cagttgaatt acaaggaaa agatcaagc tacagatatg 720
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aacaacaaaa tgtatagaaa aatcatgtct gtgacttcat ttttaaagt acttgctcag 1380
ctcaactgca tttcagttgt attatagtcc agttcttctc aacattaaaa cctatagcaa 1440
tcatttcaaa tctattctgc aaattgtata agaataaagt tagaattaac aatttaaaaa 1500
aaaaaaaaaa actcgagggg gggccccggt acccaac 1537

<210> 632

<211> 1901

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (1566)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1894)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1899)

<223> n equals a,t,g, or c

<220>

<221> misc feature

<222> (1900)

<223> n equals a,t,g, or c

<400> 632

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cccgggctag cgaaaagtgg gggcagaacg aactacatct cccatcgtgc caggaggcgg 120
tcccgcccggt ttccccctgg gagttgtagt ctaacccccct cggatccaac agcaacctca 180
gtgcgtgaac tctgttatcc agaaggcctc gccctgccgc cgccgaagct ggaattcgtc 240
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ggattgcacg agccctcaga ttcatcgcta ccccgaggct aagcgccatg cctcatattg 360
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actctgggggt tcccatcatt gctgccaata tggatactgt gggcaccttt gagatggcca 540
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ggcaagagtt tgctggccag aatcctgact gtcttgagca tctggctgcc agctcaggca 660
caggctcttc tgactttgag cagctggaac agatcctgga agctattccc cagggtgaagt 720
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aaaaaaaaa aaaaaggggg gccgctttaa agnccaann t 1901
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<210> 633
<211> 1750
<212> DNA
<213> Homo sapiens

<220>
<221> misc feature
<222> (809)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (821)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1676)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1689)
<223> n equals a,t,g, or c

<220>
<221> misc feature
<222> (1712)
<223> n equals a,t,g, or c

<400> 633
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tgtggcctct actacaagct gcacaatgtt aacaggccac tgaccatgaa gaaggaagg 120
atccagactc ggaaccggaa gatgtccaac aagtccaaga agagcaagaa aggggcggag 180
tgcttcgagg agctgtcaaa gtgcatgcag gagaagtcac ccccttcag tgcagctgcc 240
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ctgcccactc cgacgcccac ccaccctctc tccagcctct ccttcggcca ccccacccg 360
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tccggcattc 1750

<210> 634

<211> 1926

<212> DNA

<213> Homo sapiens

<220>

<221> misc feature

<222> (13)

<223> n equals a,t,g, or c

<400> 634

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<211> 1346

<212> DNA

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<221> misc feature

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<210> 636

<211> 1584

<212> DNA

<213> Homo sapiens

<400> 636

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<211> 1663

<212> DNA

<213> Homo sapiens

<400> 637

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